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Slow Food Foundation
for Biodiversity

Do the Slow Food Presidia Represent an Opportunity for the Future of the Mountains?

Analysis of the economic, social and environmental sustainability of 44 mountain Presidia of Europe

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THE PRESIDIA PROJECT

The Presidia project was started 15 years ago to safeguard native livestock breeds, edible plant varieties and artisanal food products at risk of extinction, by strengthening producers' organization, promoting local areas, preserving traditional techniques and knowledge and encouraging sustainable practices.
The Presidia involve communities of small-scale producers who are willing to collaborate and work together to decide protocols for production and how to promote their products.
Slow Food works with the producers (organizing training sessions and experience exchanges), promotes the products using stories (about the producers, traditions, places and production techniques) and, thanks to its network, brings together producers and consumers (through events, the involvement of chefs and support for forms of direct marketing like farmers' markets and collective buying groups).

Currently there are over 400 Presidia in 50 countries around the world.

Their objectives can be broken down into three levels:

- **sociocultural**: improve the social role of producers; strengthen their organizational capacity, cultural identity and self-esteem; promote the local production area.
- **environmental**: safeguard biodiversity, improve production sustainability.
- **economic**: improve the producers' returns, develop a local economy around the product, increase employment, promote a short production and distribution chain.

SLOW FOOD PRESIDIA AND THE MOUNTAINS

Over the past 30 years, the farming population in the Alps has fallen by 40%, and half of the farms active at the start of the 1980s have closed. In the French Alps, 75% of cultivated land has been lost in the last century and a half. A good two-thirds of Alpine farm owners are over 45, and only in Bavaria is there a higher presence of young people. Without a generational turnover, within 20 years two-thirds of farms in the Alps will shut down, and already agriculture is almost always a secondary, subsidiary activity. The situation is similar in Europe's other major mountain ranges.
The abandonment of the mountains has serious environmental, social and economic consequences. We must not think of mountain pastures as wild places, able to self-regulate. High-altitude meadows require constant and careful management. They cannot be used too much or for too long, and they must be kept free from infesting species. Without herders and cheesemakers, the pastures would grow wild and disappear.
Further down in the valleys, depopulation means an increasingly hard and impoverished life for the few who remain: Schools, post offices, hotels, bars, restaurants, hospitals and shops close down, and more and more young people choose to leave for the cities.
Slow Food has examined the environmental, economic and social sustainability of Presidia in European mountains to understand if the Presidium model has managed to find new paths and opportunities in complex contexts, seemingly destined for abandonment, and to identify the potential and problems linked to rural life, farming and food production in the mountains.
The study analyzed a sample of 44 mountain Presidia, located in the European Union, Switzerland and Armenia. The mountain ranges involved were the Alps, the Apennines, the Pyrenees, the Carpatians and the Caucasus.
The majority of Presidia were mountain cheeses or dairy products, but other food categories were also surveyed. The sample included 24 dairy products, 11 plant varieties, 5 cured meats, 3 livestock breeds and 1 honey Presidium.

The 44 analyzed Presidia

N.	SURVEY YEAR	PRESIDIUM NAME	COUNTRY	CATEGORY	TYPE
1	2013	Aged Asiago	Italy	Dairy	cow's milk cheese
2	2013	Aurina Valley Graukäse	Italy	Dairy	cow's milk cheese
3	2013	Bagolino Bagòss	Italy	Dairy	cow's milk cheese
4	2012	Béarn High Pasture Cheese	France	Dairy	sheep's/cow's milk cheese
5	2013	Bregaglia Valley Mascarplin or Mascarpel	Switzerland	Dairy	goat's milk cheese
6	2013	Brigasca Sheep Toma	Italy	Dairy	sheep's milk cheese
7	2013	Bucegi Mountains Branza de Burduf	Romania	Dairy	sheep's/cow's milk cheese
8	2012	Cilento Cacioricotta	Italy	Dairy	goat's milk cheese
9	2013	Coazze Cevrin	Italy	Dairy	goat's/cow's milk cheese
10	2013	Formadi Frant	Italy	Dairy	cow's milk cheese
11	2013	Heritage Bitto	Italy	Dairy	cow's/goat's milk cheese
12	2013	Macagn	Italy	Dairy	cow's milk cheese
13	2013	Malga Monte Veronese	Italy	Dairy	cow's milk cheese
14	2013	Moena Puzzone	Italy	Dairy	cow's milk cheese
15	2012	Motal	Armenia	Dairy	goat's milk cheese
16	2013	Mountain Pasture Castelmagno	Italy	Dairy	cow's milk cheese
17	2013	Orobiche Valleys Traditional Stracchino	Italy	Dairy	cow's milk cheese
18	2012	Pistoia Mountain Pecorino	Italy	Dairy	sheep's milk cheese
19	2013	Primiero Mountain Botìro	Italy	Dairy	cow's milk butter
20	2013	Raw Milk Fribourgeois Vacherin	Switzerland	Dairy	cow's milk cheese
21	2013	Saras del Fen	Italy	Dairy	cow's milk cheese
22	2013	Saviore Valley Fatulì	Italy	Dairy	goat's milk cheese
23	2013	Tcherni Vit Green Cheese	Bulgaria	Dairy	sheep's/cow's milk cheese
24	2013	Valtorta Agrì	Italy	Dairy	cow's milk cheese
25	2013	Alpago Lamb	Italy	Animal	sheep breed
26	2012	Nebrodi Black Pig	Italy	Animal	pig breed
27	2013	Sambucano Lamb	Italy	Animal	sheep breed
28	2012	Conca Casale Signora	Italy	Meat	cured pork meat
29	2012	Gioi Soppressata	Italy	Meat	cured pork meat
30	2013	Locarno Valleys Cicitt	Switzerland	Meat	cured goat meat
31	2013	Pitina	Italy	Meat	cured goat/sheep/game/pork meat
32	2013	Valdesi Valleys Mustardela	Italy	Meat	cured pork meat
33	2013	Belluna Valley Giàlet Bean	Italy	Plant	legume
34	2012	Civita di Cascia Roveja	Italy	Plant	legume
35	2013	Farina Bòna	Switzerland	Plant	grain
36	2013	Lungau Tauern Rye	Austria	Plant	grain
37	2012	Madonie Manna	Italy	Plant	sweetener
38	2013	Radìc di Mont	Italy	Plant	vegetable
39	2013	Resia Garlic	Italy	Plant	vegetable
40	2012	Santo Stefano di Sessanio Lentil	Italy	Plant	legume
41	2012	Sibillini Mountains Pink Apple	Italy	Plant	fruit
42	2012	Sorana Bean	Italy	Plant	legume
43	2013	Vessalico Garlic	Italy	Plant	vegetable
44	2013	High Mountain Honeys	Italy	Bee product	sweetener

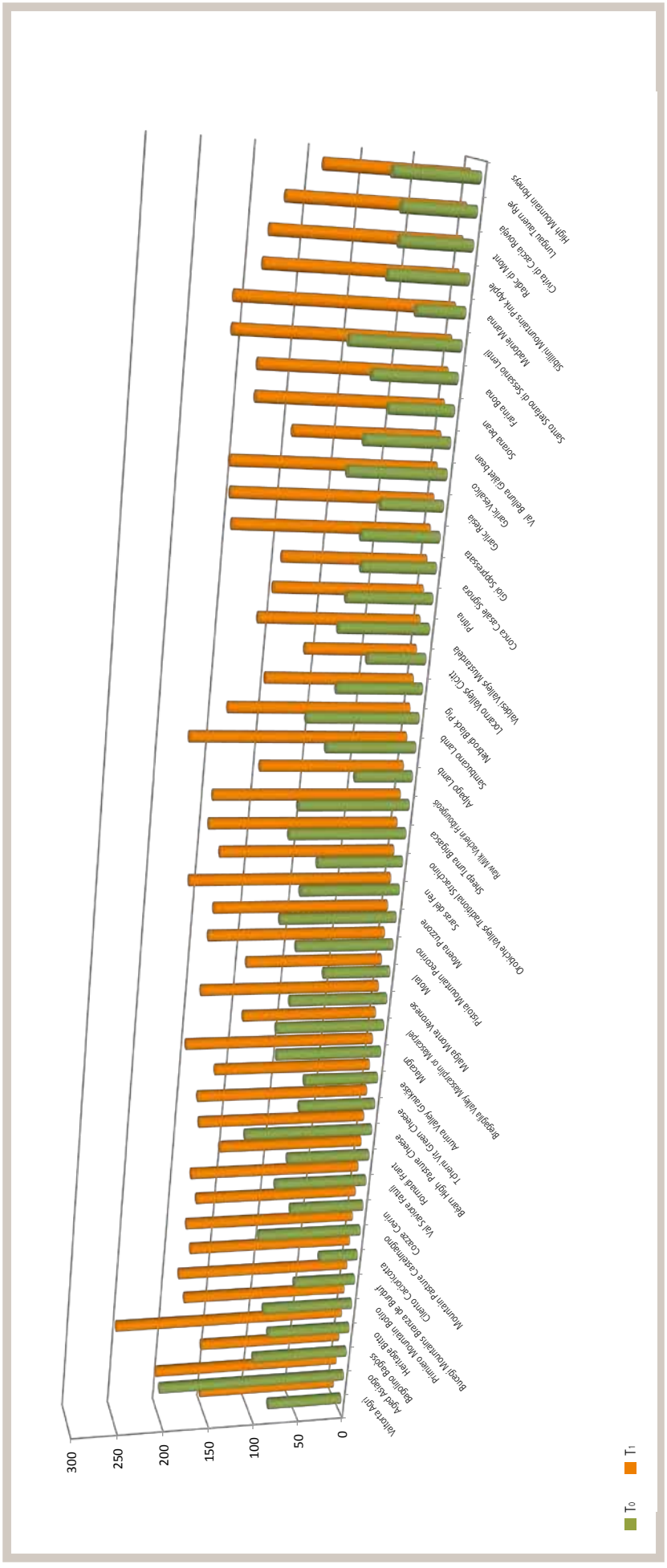
The analysis of each Presidium in the sample was based on around 50 indicators, a high enough number to explain the Presidium system in its complexity, but also limited enough to guarantee easy applicability.
The research was based on the initial hypothesis that it is possible to quantify the various indicators of a complex agricultural system (the Presidium), assigning them a numerical score, weighting these scores and finally aggregating the information obtained in order to assign an overall sustainability score to each individual Presidium.
A questionnaire was developed for the project coordinators, to establish the situation at the time T0 (year the Presidium was launched) and T1 (July 2013).

The survey questions were based on an evaluation grid, divided into three levels:

- the sociocultural scale takes into consideration the product's characteristics, its cultural value, the role of young people, the level of organization, the relationships between producers and external subjects (local authorities, institutions, universities, other producers) and the Presidium's communication and visibility.
- the agri-environmental scale analyzes the Presidium's work to safeguard biodiversity (revival of one or more breeds or plant varieties), the protection of the landscape, the sustainability of cultivation or farming techniques and the use of renewable energy and recyclable materials.
- the economic scale evaluates the quantities produced, the number of producers, the types of markets and sales prices.

Overall sustainability

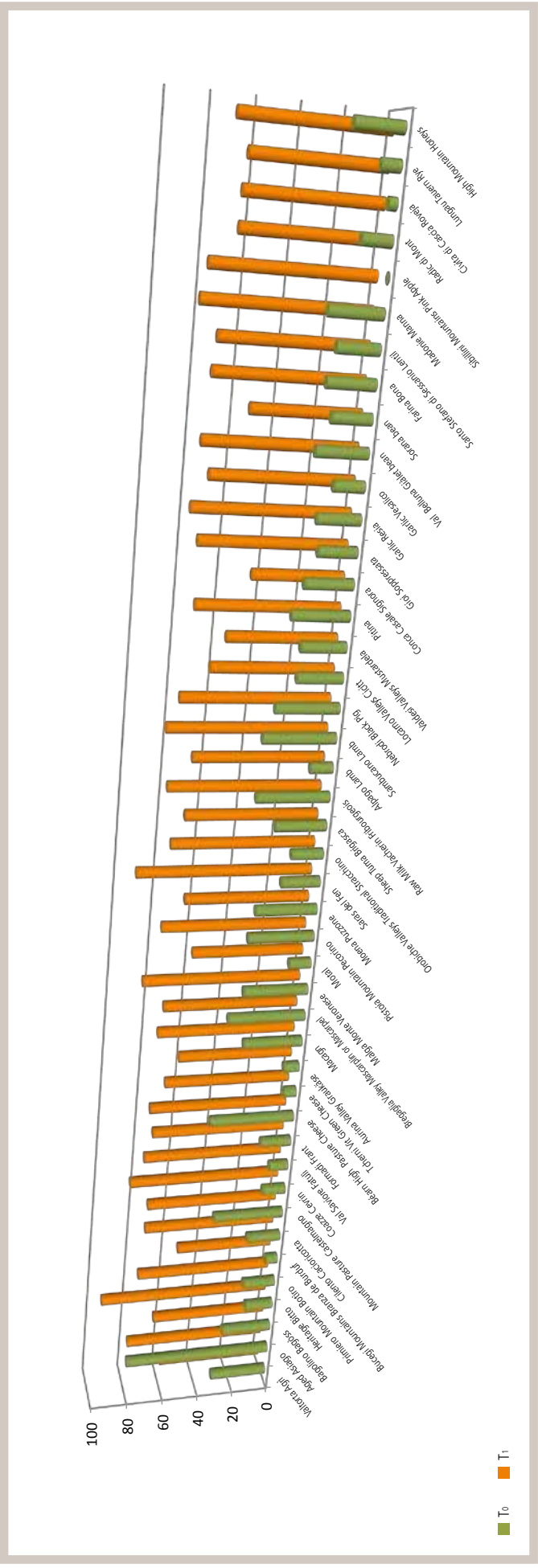
The data relating to time T0 represent the situation when the Presidium was established, while the data relating to time T1 represent the existing situation in July 2013, when the data was collected.
It is clear from Figure 1 that all the analyzed Presidia significantly improved their position in the overall sustainability scale, thanks to the actions taken since the Presidium was started.



> Figure 1

Sociocultural sustainability

The most significant progress recorded by this research can be seen in the sociocultural scale (Figure 2).
The Presidia under examination are generally located in marginal areas, in the best of cases somewhere with some seasonal tourism, but more often in difficult places that are impoverished and isolated. In these contexts it has been much harder for producers to create relationships, collaborate, unite in organizations and be in contact with local authorities, the press and research institutions. The Presidia proved particularly effective on this front and have obtained excellent results in just a few years. The gap between the level recorded on the sociocultural scale when the project was started (T0) and the level recorded today (T1) is generally large, with particularly significant improvements for humble products like Resia garlic, Vessalico garlic, Santo Stefano di Sessanio lentils, Sibillini pink apples, Radìc di Mont, Tauern rye and Madonie manna, but also for certain cheeses, such as Tcherni Vit green cheese, Coazze Cevrin, heritage Bitto and Saras del Fen.



> Figure 2

The youth problem: still unresolved

If we extract from the sociocultural scale the indicator relating to the active presence of young people on the farms, we can see a key issue emerging. Despite many interesting cases—stories of young people who choose to stay or who return to the mountains after studying or working in another job—unfortunately the number of Presidia with no improvement is still too high.

In 14 of the 44 Presidia, the situation relating to the presence of young people has not changed since the start of the project. True, in the remaining 30 Presidia the number of producers under 35 has increased—and therefore the overall figure is positive. But this indicator is struggling to take off, unlike many others (price, market access, organizational capacity) which have increased significantly in all the Presidia analyzed.

In general, from the results of this research, it seems as though it is easier to involve young people in mountain Presidia for plant products (legumes, grains, fruits). The data for cured meat Presidia is completely negative, and it seems that these products are of no interest to new generations. The attraction of work in mountain dairies seems to be growing, with many cheesemakers' children deciding to stay or return after some years away and continue the work of their parents. This is the case for Aged Asiago, Bagolino Bagòss, Heritage Bitto (one of the Italian Presidia with the highest number of young people) and Béarn High Pasture Cheese. Among the main reasons for this return to the mountains is the higher income that they can earn from selling the cheese, thanks to the Presidium's promotional work.

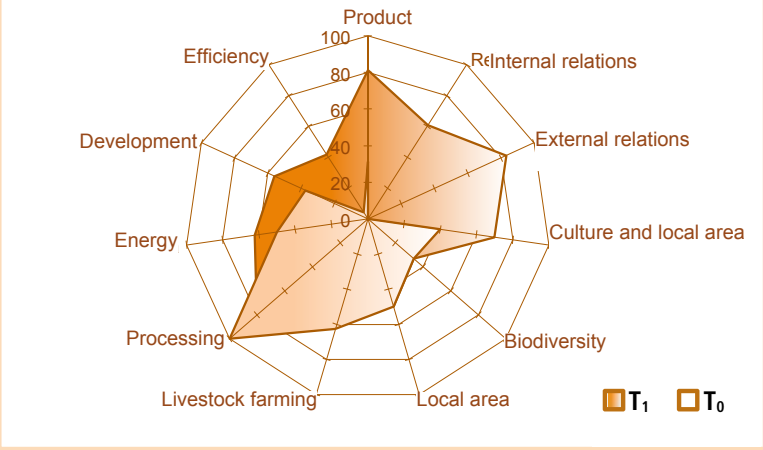
Considerable attention must therefore be dedicated to generational turnover. A strategy for relaunching young people's involvement in mountain food production must probably start from an analysis of the challenges facing young people and ensuring that the capacity exists to guarantee them an adequate income, services, training and support.

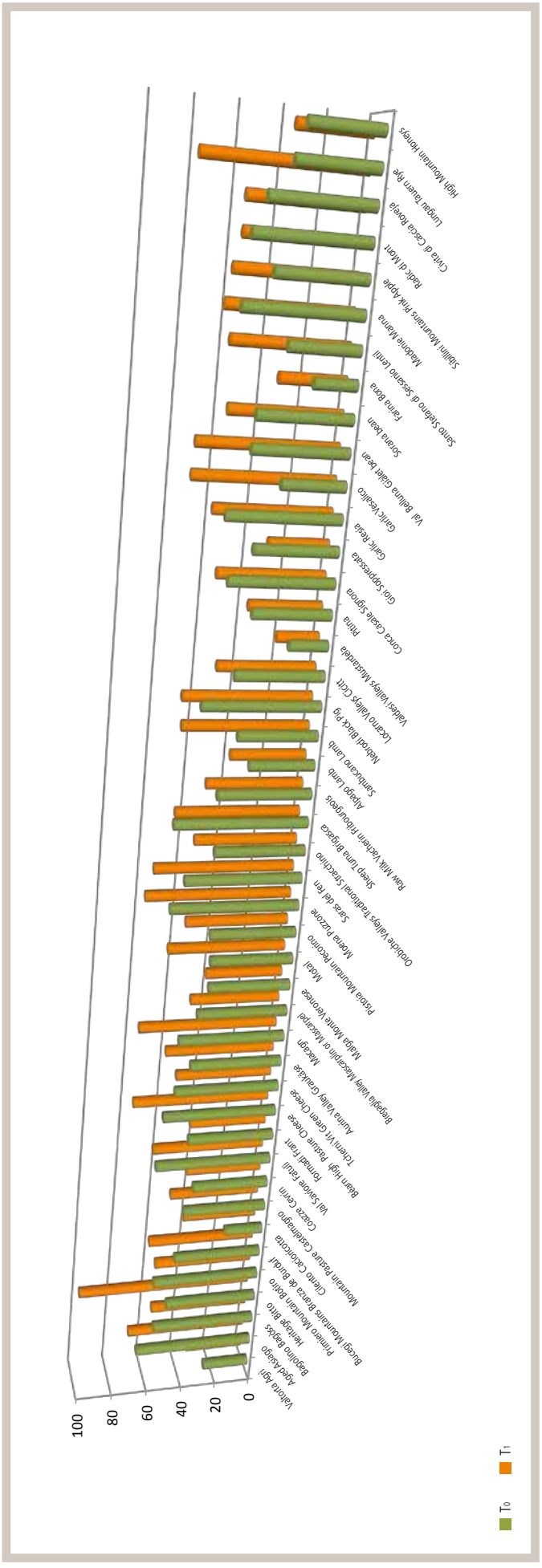
Example of a Presidium with excellent sociocultural results

Primiero Mountain Botìro – Italy, Trentino – Presidium launch date 2008

A collective creamery for the area and a cooperative of 40 farmers already existed before the Presidium, but with the launch of the project—reviving Alpine butter ("botìro") made from raw cream—a protocol was drawn up for the production of the raw-milk butter, and an extremely interesting process was started. This saw the recovery of mountain dairies in very remote areas, places where animals were pastured but the milk was usually taken down into the valley for processing. The Presidium's first step was to reintroduce the phase of letting the cream rise directly in the mountain dairy (the cream is then processed in the creamery down in the valley using a traditional wooden churn). The Presidium's objective is eventually to make the butter in the mountains, as it was centuries ago, and, most importantly, to involve other mountain dairies in the production of butter. The Trento Provincial Authority has helped the Presidium purchase equipment and it receives technical assistance from the San Michele all'Adige Agricultural Institute. The producers have been able to meet and learn from other Presidia and interest from consumers and restaurateurs is growing. Slow Food has organized various tastings; the students of the University of Gastronomic Sciences in Pollenzo have visited the mountain dairies and the butter has received significant press coverage. In particular, the restoration of the historic mountain dairies has received great attention, and they have even become tourist destinations.

These aspects are highlighted in the graphic, which shows the progress of internal and external relations and the use of the product (sociocultural scale). With regards to the transformation aspects, the animal rearing practices in the mountains, the energy use (use of solar power in the Alpine huts) and stewardship of the land, all elements of the agri-environmental scale, the values were already high at the start of the Presidium.

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Valtorta Agri
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Bagolino Bagoss
Heritage Bitto
Primiero Mountain Bodio
Bucegi Mountains Branza de Burduf
Cilento Canestrato
Mountain Pasture Caseificio
Coazze Cevin
Val Savoie Tomalf
Tomadf Fiani
Bdam High Pasture Cheese
Tclaim Vt Green Cheese
Alumia Valley Cheese
Macagn
Bergaglia Valley Mazzarolin or Mazzarpal
Malga Monte Veronese
Nadal
Pozoia Mountain Pecorino
Madia Puzzone
Sase del Ren
Oboshie Valleys Traditional Stracchino
Sheep Tuma Brigasca
Raw Milk Vacherin Fribourgeois
Alpago Lamb
Sanbuceno Lamb
Mestrod Black Pig
Locano Valleys Cicit
Valdesi Valleys Mustardela
Pluna
Conca Casale Sgnoa
Gjol Soppressata
Garlic Rosa
Garlic Vesalico
Val Bolima Goat Bean
Soiana Bean
Farma Bona
Santo Stefano di Sessanio Lentil
Maddone Mamra
Sibillini Mountains Pink Apple
Radic di Mont
Cmta di Cocca Boveja
Lungau Bauern Rye
High Mountain Honeys
T1
T0

> Figure 3

Agri-environmental sustainability

Over the past 60 years, industrialization and urbanization have gradually depopulated the mountains of Europe. The result of the abandonment is widespread environmental degradation: landslides, wildfires, avalanches caused by snow sliding on overgrown pastures, rivers that burst their banks and carry down to the valley trunks from neglected forests.
One of the main elements of mountain Presidia sustainability is their role in protecting and maintaining their local environment.
Presidia herders, whether of meat breeds (like Alpago and Sambucano lamb) or dairy breeds (whose milk is used for heritage Bitto, Monte Veronese, Moena Puzzone, Graukäse, Béarn high pasture cheeses, Primiero Botìro, Fatulì, Vacherin, etc.) have a constant custodial role. Their work, which involves clearing woods and riverbeds and maintaining hydraulic systems like drainage canals and embankments, is essential to preventing wildfires and landslides, and to keeping pastures alive. These meadows would otherwise be invaded and suffocated by shrubs. The hooves of animals churn up the earth, so that it better absorbs rainwater, and their excrement serves as fertilizer, ensuring abundant grass. Their grazing prevents the formation of layers of dry grass, which could otherwise cause fires in the summer and sliding snow and dangerous avalanches in the winter. Small animals (sheep and goats) also help to keep the forest undergrowth cleared.
In some cases, the Presidia have supported the restoration or maintenance of the roads leading to the mountain pastures, and the renovation of huts, dairies and cheese-aging facilities (for example Bucegi Mountains Branza de Burduf or Heritage Bitto, with its ancient stone calecc).
The role of beekeepers (High-Mountain Honeys Presidium) is also important, and their income is indissolubly linked to the survival of an unspoiled landscape and the wealth of wild flora.
The link with environmental protection is less significant in the case of cured meat Presidia, with the exception of products based on sheep or goat meat.

Presidia resist the temptation of commercial starter cultures

Bacterial cultures are what turn milk into cheese. They are found naturally in raw milk, on the cheesemaker's hands, on animals' udders, on the bucket used for milking and on wooden tools.
These days, however, most cheesemakers don't milk their animals by hand, wood is often banned in dairies, milk runs through steel tubes and the antiseptic environment leaves nowhere for bacterial flora to survive. As a result, many producers have started to add starter cultures to raw milk, just like the big industrial dairies working with pasteurized milk. This convenient shortcut, which eliminates defects but standardizes taste, is making a fortune for the multinationals that produce the packets of cultures. In many cases, these starter cultures are used even though they are not necessary, because they make the cheesemaking process more secure, producing more reliable results and reducing the risk of final defects. But starter cultures can also be produced in the dairy, thus maintaining the native bacterial flora and the sensory identity of the finished cheese. For years Slow Food has been encouraging producers not to use starter cultures or at least to avoid purchased ones, instead producing the starters themselves (similar to how a "mother" is prepared for sourdough or vinegar).
The research into the mountain cheese Presidia investigated this aspect, asking producers if they used commercial starter cultures or natural cultures obtained from milk. The data that emerged were extremely positive. Though it is by now a well-established practice among the majority of European producers (including artisans), the mountain cheese Presidia do not generally use commercial starter cultures. Many use self-produced milk starters instead. Only some producers in three Presidia (Raw Milk Fribourgeois Vacherin, Aged Asiago and Malga Monte Veronese) out of the 22 dairy Presidia studied used commercial starter cultures, and in all three cases, the producers are working to replace them with self-produced milk starters.
The producers of 15 Presidia (Bagolino Bagòss, Heritage Bitto, Mountain Pasture Castelmagno, Saras del Fen, Aurina Valley Graukäse, Primiero Mountain Botìro, Brigasca Sheep Toma, Pistoia Mountain Pecorino, Motal, Bregaglia Valley Mascarplin or Mascarpel, Coazze Cevrin, Bucegi Mountains Branza de Burduf, Macagn, Valtorta Agrì and Cilento Cacioricotta) do not use them at all, instead simply relying on the bacterial flora naturally present in the milk and the working environment.

Longer aging times, but historic aging sites are being lost

Based on the temperature, humidity and bacterial flora in their aging environment, cheeses evolve over time, developing complex fragrances and flavors that help give a particular cheese its unique sensory characteristics.
The research looked into two aspects: whether the Presidia had contributed to lengthening aging times and how the places where the cheeses were aged had changed over time.
All the cheese Presidia established production protocols that set out minimum aging times that were longer than those commonly followed before the start of the project. In some cases, the times had been shortened to meet the demands of the market: the average consumer, habituated to industrial cheeses, tends to prefer fresh, mild cheeses.
Unfortunately, the data on aging facilities and environments confirm that they are among the main victims of hygiene and food safety laws. Many traditional sites used in the past to store and age cheeses, like caves and stone cellars, are no longer used.
Some Presidia have preserved or renovated these locations, maintaining the conditions that ensure the development of good molds, essential to guaranteeing the final quality of the cheese and, in some cases, they have rebuilt natural aging facilities as they were in the past. These include Heritage Bitto, Mountain Pasture Castelmagno, Béarn High Pasture Cheeses, Bregaglia Valley Mascarplin or Mascarpel, Motal, Pistoia Mountain Pecorino, Bucegi Mountains Branza de Burduf, Orobiche Valleys Traditional Stracchino, Aurina Valley Graukäse and Saras del Fen.
Others—like Coazze Cevrin, Aged Asiago, Brigasca Sheep Toma and Savoire Valley Fatulì—have preserved some traditional sites, which are still used along with new climate-controlled rooms. In some cases, the aging takes place only in climate-controlled rooms, for example for Cilento Cacioricotta, Formadi Frant, Moena Puzzone, Fribourgeois Vacherin, Malga Monte Veronese and Primiero Mountain Botìro.

What do the Presidia animals eat?

The production protocols for mountain cheese Presidia always specify grazing during the summer at high altitudes and ban the use of silage made from corn or genetically modified legumes (soya). The producers usually use hay that is locally produced, or make it themselves.
Supplementary feed is allowed in places where pasturing is not sufficient, for environmental or climatic reasons.
A diet based on mountain pasturing is essential to ensuring the sensory quality of the cheese, as well as giving the different cheeses their own unique identity.
From this perspective, the most virtuous Presidia, where supplementary feed is never given, or only during periods of necessity, are Heritage Bitto, Bucegi Mountains Branza de Burduf, Bregaglia Valley Mascarplin or Mascarpel, Brigasca Sheep Toma, Savoire Valley Fatulì, Tcherni Vit Green Cheese, Cilento Cacioricotta, Raw Milk Fribourgeois Vacherin, Mountain Pasture Castelmagno, Aurina Valley Graukäse and Bagolino Bagòss.

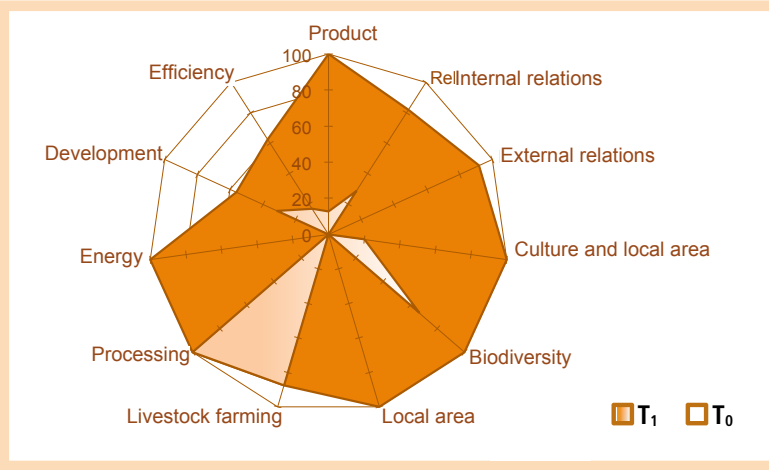
Two examples of Presidia with excellent agri-environmental results

Heritage Bitto – Italy, Lombardy – Presidium launch date 2003

The Presidium's production protocol specifies that traditional production methods be respected; that animals have a natural, pasture-based diet, with no extra feed; that starter cultures never be used and that native cow and sheep breeds be safeguarded. The reintroduction of the Orobica goat is nearly complete, and now the farmers are focusing on the Bruno Alpina cow. Particularly worthy of note is the practice of "turning" the pasture: During the summer months the herds are taken in stages from the lowest station to the highest, consuming the grass of the pastures in the most rational way. The fresh milk must be taken quickly to the *calecc* (stone huts) and processed immediately, while still warm. During the pasturing period, the animals spend the nights in *barech*, drystone enclosures.

The components expressing agri-environmental sustainability have grown rapidly, reaching the maximum score. The Presidium has recruited a significant number of young people to work on the mountain pastures: several children of producers have decided to remain on the farm and continue making cheese, including a young woman of 18 years. Extra-aged Bitto often wins awards. Relations between producers are very strong, due to many years of struggle by the Bitto Valleys association to assert the historical value of their cheese and the need to differentiate it from products in other valleys that use milk from cows given feed. Ten years after the Presidium was created, the producers of Heritage Bitto enjoy a strong network of external relationships, which supports them in commercialization and more. The members of the company managing the shared facilities for ageing Heritage Bitto also buy the cheese.

The main contributions to the economic sustainability scale come from creating a facility for shared ageing, to which producers send 50% of their production; acquiring independence in selling Bitto cheese (previously the Presidium producers sold to large dealers/refiners); qualitative improvements to the product (which is aged after careful selection of the best forms); and development of creative commercial options (purchasers of a Bitto form can request personalized branding, or can use the Presidium facility as a cheese bank, by buying a fresh form, leaving it to age and collecting it later or selling it back to the Presidium). The slight drop in the number of producers (16 to 14) is compensated by a rise in prices, which not only produces benefits from the price per kg, but also because the arrangement with shared ageing and a managing company (to which the cheesemakers association also belongs) means that producers receive worthwhile profits at the end of each year.



Sambucano Lamb – Italy, Piedmont – Presidium launch date 2000

The Escarun consortium, which started the Presidium, first worked to save the Sambucano breed. Numbers were down to a last flock of 80 sheep, but there are now 4,000 animals in the upper Stura Valley. The reintroduction of sheep farming into the mountains has meant a better protection of the territory, more care for pastures and the building or renovating of small stone dairies. The Presidium has worked hard to improve the welfare of the animals: The sheds were expanded, the lambs are weaned naturally, the sheep are protected from wolves by lightly electrified fences (fuelled by solar panels) and the animals are not mutilated in any way.

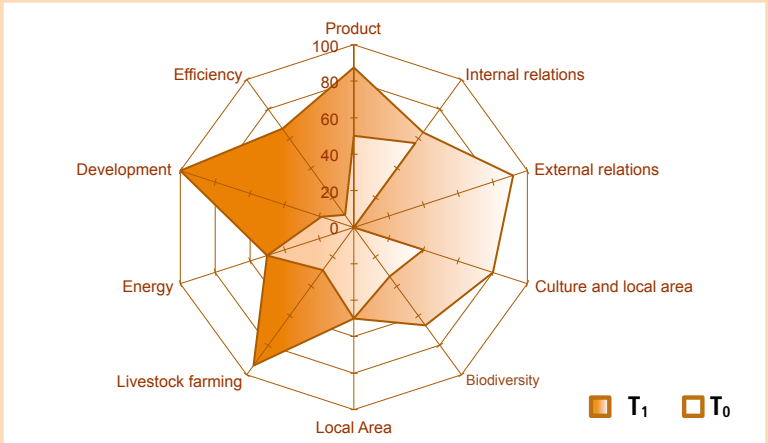
All these aspects are well represented by the value obtained on the agri-environmental scale (see the points "livestock farming" and also "biodiversity").

But all three sustainability scales have risen significantly above the threshold level. Values on the sociocultural scale have

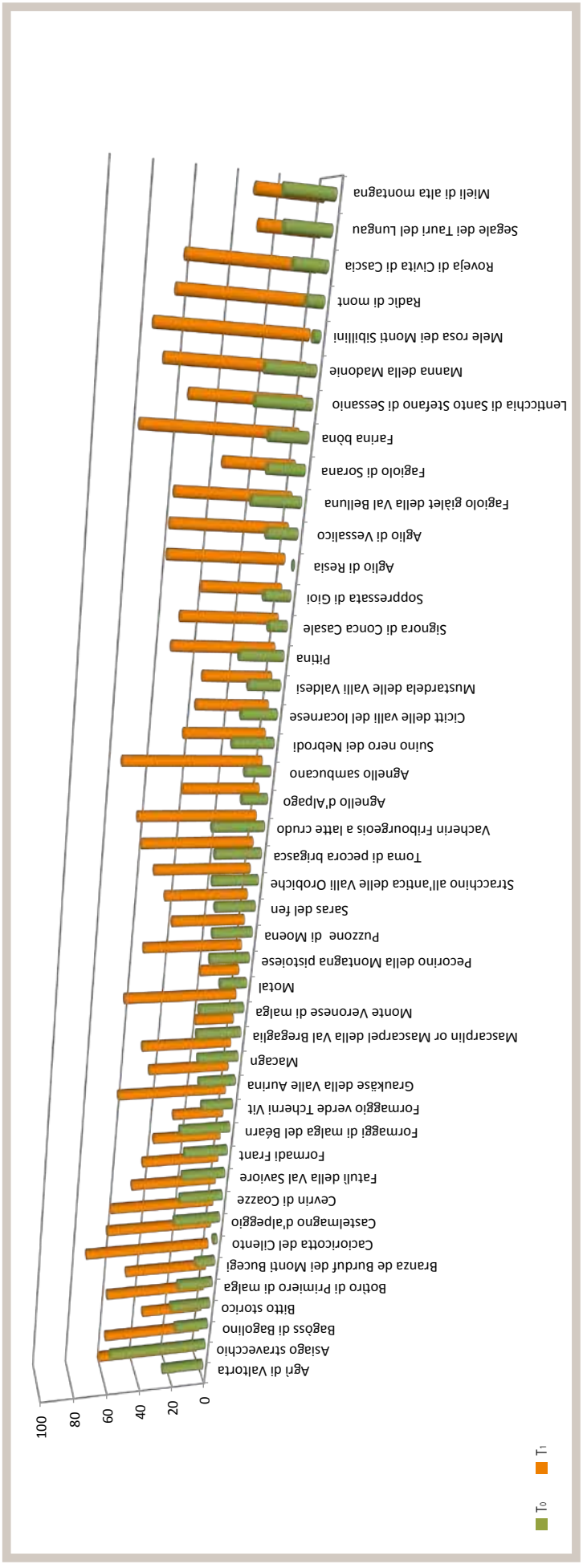
doubled and increased three-fold on the economic scale. The main contributor to growth in sociocultural sustainability is external relations, with the producers participating in many events and establishing relationships and networks with Slow Food and consumers. There has also been a strong recovery of local identity linked to pastoral traditions (an attractive eco-museum dedicated to pastoral agriculture has been set up in Pontebernardo, there are many exchanges with similar groups of producers and training activities are organized with schools). Local restaurants have revived traditional recipes based on Sambucano lamb.

On the agri-environmental scale, it has not been necessary to make many changes to traditional practices as they were already highly sustainable. Small improvements have been made, with a prohibition on feed containing GMOs and a requirement to control crossbreeding to further reduce crossbreeds in flocks. Practically no packaging is used: Sambucano animals are sold whole and butchers create the portions as appropriate, using vacuum packing if needed.

There have been many improvements on the economic scale. Farms have constructed new sheds, new pastures have been introduced, the number of herders has increased (in the mid-1980s there were three, when the Escaroun consortium was created there were 10 members and now there are 60) and stock numbers increased (from the last remaining flock of only 80 animals there are now 5,000 in the upper Stura Valley), products diversified (a workshop has been built to make cheese using Sambucano sheep's milk and the wool is now processed), new commercial channels identified: at one time Sambucano lamb could only be found at local butchers, while now it is also available in a large retail chain, at Eataly, various butchers and local restaurants, as well as many Piedmontese restaurants belonging to the Alliance Between Chefs and Presidia, who offer it at attractive prices. The creation of the Lou Barmaset cooperative has been particularly successful: it slaughters the animals, guarantees traceability and sells the meat at good prices.



Economic sustainability



> *Figure 4*

The values of the economic scale are generally positive, in particular for the Presidia that started out with an almost non-existent market and are now sold nationally (and sometimes internationally) at profitable prices. Examples include Civita di Cascia Roveja, Resia Garlic, Vessalico Garlic, Radìc di Mont, Tcherni Vit Green Cheese and Cilento Cacioricotta.
The indicator relating to price increased in almost every case. Guaranteeing an adequate return for those who are working in difficult, taxing conditions is in fact one of the project's objectives. Often the price of Presidia products is higher compared to the market average, because it takes into account production times (long and slow), difficult working conditions (in mountain pastures, at altitudes as high as 2,000 meters, alone for the whole summer), the complexity and effort involved in production (being a cheesemaker means working for up to 16 hours a day), the uniqueness of the flavors (thanks to the raw milk, the native breeds and the grasses in the pastures). The Presidia seek on the one hand to set prices that allow the producers to survive, and on the other to explain to consumers the story behind the product, the complexities of the production process, the high costs involved… in other words, the reasoning behind that price. Let's look at an example. The High Mountain Honeys Presidium was started around 10 years ago, between Piedmont and Lombardy, for rhododendron honey, mixed flower honey and fir honeydew produced at altitudes over 1,200 meters. The beekeepers follow traditional nomadic practices; they live in the lowlands or the hills, and in the summer they bring their hives up into the mountains. Thanks to the Presidium, these honeys now command higher prices than regular honey (between 6 and 8 euros instead of the usual 4 to 5 euros per jar). There are many reasons for this. First of all, production is not constant, given the unpredictability of the weather. Even a good season (which comes every four or five years) offers a smaller output compared to classic honeys (like acacia) because of the low yield per hive. The practice of nomadism is very risky for the bees' well-being (and therefore also for the beekeeper's business) because temperature and pressure changes make them weak and more susceptible to disease. Additionally, the production costs are very high; just think of the cost of petrol for beekeepers who have to travel many kilometers every week to check on their bees and to make the best of their business.

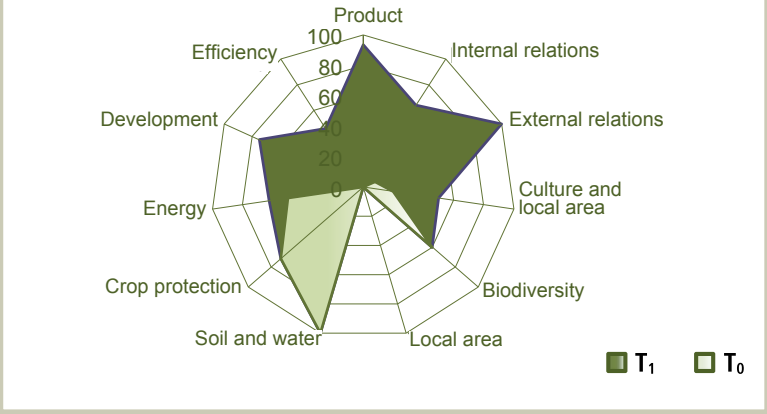
Humble products on the up

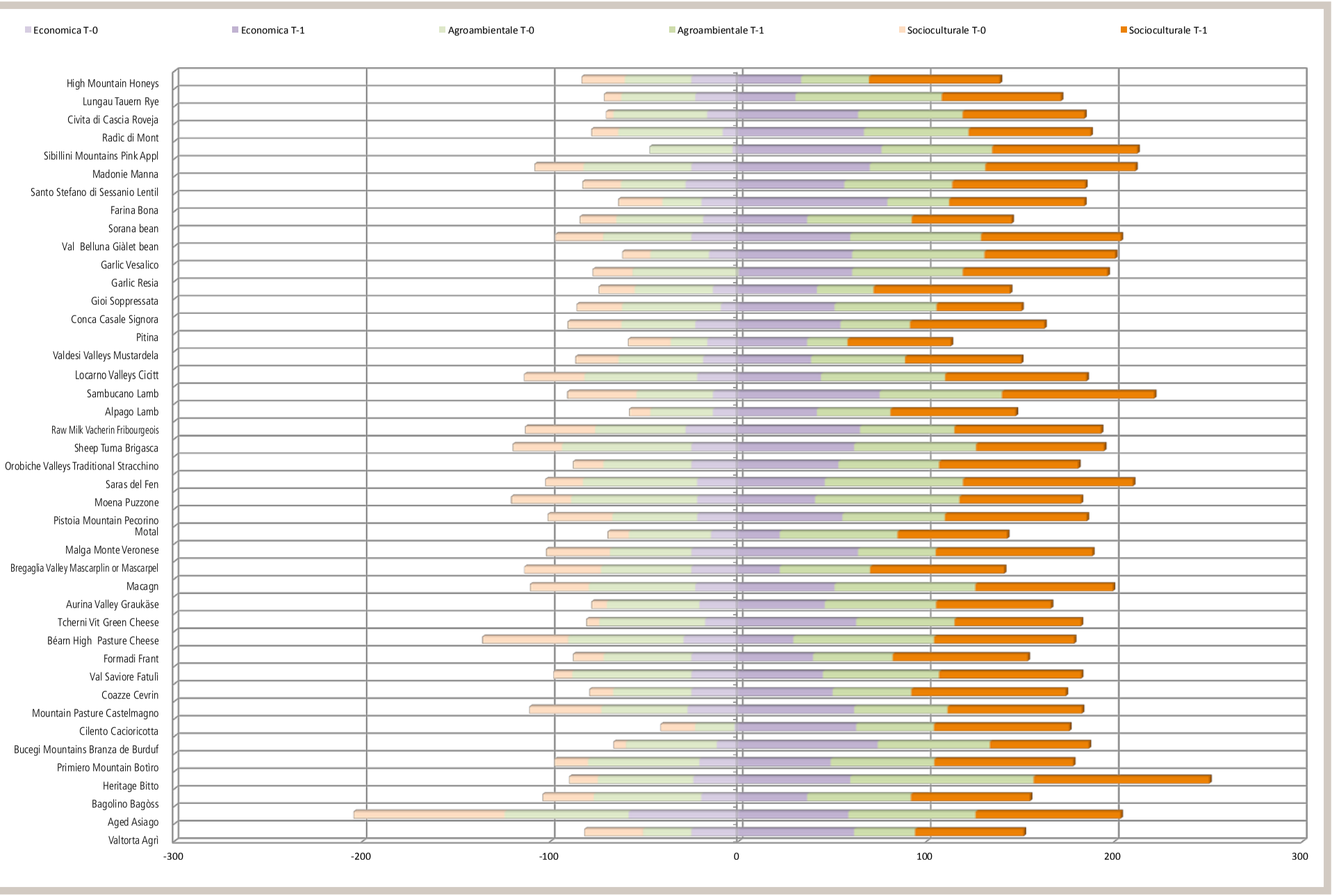
In general, on all scales, the most humble products—like legumes and grains—achieved excellent results, probably because they started with much more problematic situations. For mountain agriculture, clearly the decision to diversify (though agriculture, animal farming, beekeeping) is a positive one, as is the choice to focus on native varieties. This kind of progress would not be possible with anonymous fruits or vegetables, with no history or link to the local area.

Resia Garlic – Italy, Friuli – Presidium launch date 2004

Nothing existed before the establishment of the Presidium: no form of organization, no protocol, no relationship between producers and institutions, the press or the Slow Food network. Today the producers are joined in an association, have signed a production protocol and have a shared brand. Since 2011, the Presidium has organized an annual festival celebrating Resia garlic. But most importantly, today this product is at the heart of a closely-knit network, receiving economic support from the Resia municipality and the Prealpi Giulie Park and attention and technical advice from Cirmont (the international center for mountain research), the Park of Udine and the University of Udine. All these aspects are represented by very high scores on the sociocultural scale (internal and external relations). The score obtained in "use of the product" should also be considered among these due to the fact that the Presidium has also starting producing jars of garlic paste.

When the Presidium was started, the number of producers immediately increased from 5 to 15, and a few years later, their numbers had climbed to 30. Annual production grew from 80 kilos to 3 tons. Initially only produced for home consumption, a differentiated market soon developed, with the product now sold locally (75%), nationally (20%) and internationally, in Slovenia and Austria (5%), elements highlighted by high values in "efficiency" and "development" on the economic scale.




Economica T-0
Economica T-1
Agroambientale T-0
Agroambientale T-1
Socioculturale T-0
Socioculturale T-1
High Mountain Honeys
Lungau Tauern Rye
Civita di Cascia Roveja
Radic di Mont
Sibillini Mountains Pink Appl
Madonie Manna
Santo Stefano di Sessanio Lentil
Farina Bona
Sorana bean
Val Belluna Giàlet bean
Garlic Vesalico
Garlic Resia
Gioi Soppressata
Conca Casale Signora
Pitina
Valdesi Valleys Mustardela
Locarno Valleys Cicitt
Sambucano Lamb
Alpago Lamb
Raw Milk Vacherin Fribourgeois
Sheep Tuma Brigasca
Orobiche Valleys Traditional Stracchino
Saras del Fen
Moena Puzzone
Pistoia Mountain Pecorino Motal
Malga Monte Veronese
Bregaglia Valley Mascarplin or Mascarpel
Macagn
Aurina Valley Graukäse
Tcherni Vit Green Cheese
Béarn High Pasture Cheese
Formadi Frant
Val Saviore Fatuli
Coazze Cevrin
Mountain Pasture Castelmagno
Cilento Cacioricotta
Bucegi Mountains Branza de Burduf
Primiero Mountain Botiro
Heritage Bitto
Bagolino Bagòss
Aged Asiago
Valtorta Agri
-300
-200
-100
0
100
200
300

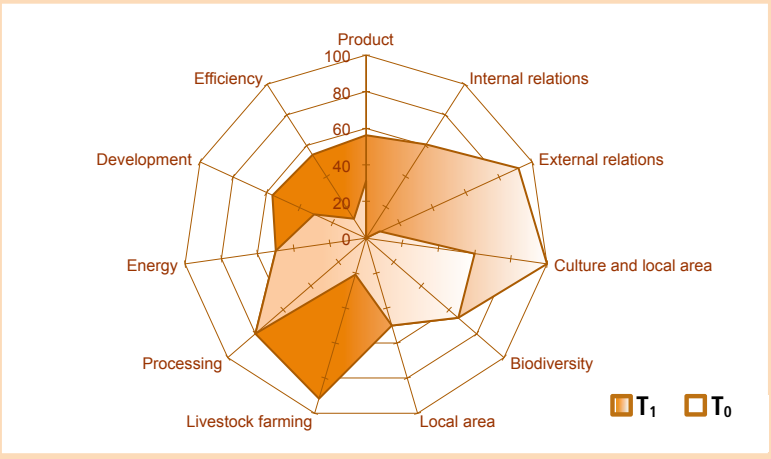
PRESIDIA RESULTS

We present below a summary of the results for each Presidium, starting with dairy products. The Presidia are presented in alphabetical order within each group.
Each Presidium has a radar plot showing results for the various components, giving an overview of the data and highlighting strengths, weaknesses and improvements in sustainability.

Cheeses and dairy products

Aged Asiago – Italy, Veneto – Presidium launch date 2000

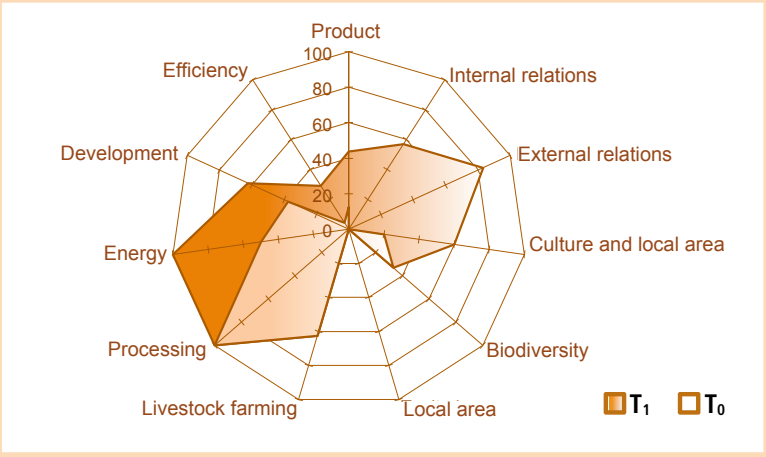
Aged Asiago is made in the mountains using milk from cows grazing on alpine pastures. The Presidium brings together a group of producers who only work with summer milk and produce an Asiago aged for at least 18 months.
In the past 10 years of Presidium activity, Slow Food has highlighted the importance of protecting mountain pastures and reviving this cheese's traditional aging, which is carried out for up to 18 months and was on the verge of disappearing



in 2000. Producers have recognized the need to meet, cooperate with and establish constructive relations with the PDO consortium (which was initially critical of the Presidium) and to learn more about traditional production. The Presidium has enabled links between the Asiago high country and dairy production to be strengthened, with Aged Asiago attracting the attention of national and international media. This has resulted in a threefold growth of sociocultural sustainability. The consumption of Aged Asiago has grown in the years since the start of the Presidium, but today consumers are again seeking less aged Asiago. This has cause a slight decrease in the value of "use of the product."
The agri-environmental scale has not recorded significant changes because, as with other mountain pasture products, the project was created to promote production methods that were already virtuous. Improvements mainly involve decisions by producers to ensure feed used to supplement grazing is GM-free.
On the economic scale, the number of producers has grown, but production quantity has declined recently (this number decreased after having reached 1000 forms per year), and there has also been an expansion of farm facilities. Sale prices have increased, though there are not yet any commercial partnerships able to have a significant effect on economic sustainability.

Aurina Valley Graukäse – Italy, Trentino Alto Adige – Presidium launch 2005

Graukäse ("gray cheese") belongs to the family of sauerkäse, cheeses coagulated with acid rather than rennet, common in the Tyrolese Alps. A low-fat cheese, it has ancient, "pre-technological" origins.



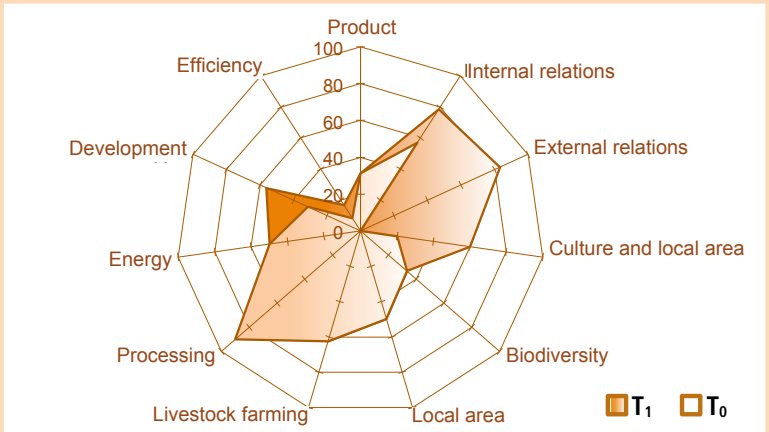
The Presidium project is based in a small valley in Alto Adige (South Tyrol), home to raw-milk cheeses that still maintain their authentic, traditional characteristics. This is an exception on the local market, crowded with industrial cheeses of little sensory value, made using commercial starters and pasteurized milk that is often not even local.

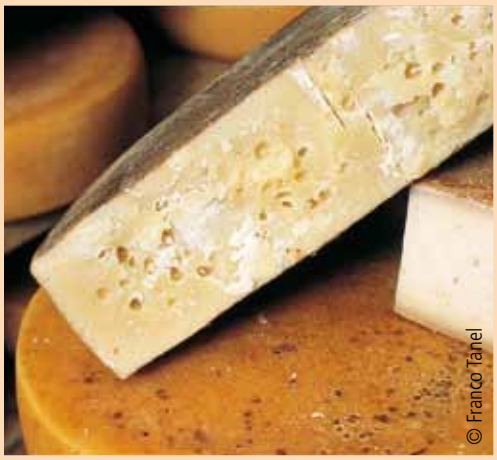
A small number of animals are grazed on the pastures surrounding the farmstead in the summer, then kept indoors over the winter. This farming method is highly sustainable and perfectly represents the traditional management of the farmsteads known as masi. Masi used to be found throughout the valleys in this part of the Alps. These positive aspects, already existing before the establishment of the Presidium, can be seen in the "processing" and "animal farming" components.

The Presidium has made huge advances in terms of energy, thanks to the installation of solar panels ("energy" component) and good progress in improving external relations. Slow Food's promotion has allowed the producer to raise her profile, and she has been featured in articles, press reports and TV programs, attracting the attention of the local authorities. The cheesemaker receives visits from schools, during which she explains the traditional cheesemaking process to the students. The success of the Presidium has helped to strengthen the product's link with the local area; it is said that gray cheese originated specifically in this valley and the two side valleys (Selva dei Molini and Rio Bianco). The "efficiency" results have been good: The price is very profitable (12-15 euros per kilo; before the Presidium the cheese was made only for home consumption) and market diversification means quality restaurants are now buying the cheese.

Bagolino Bagòss – Italy, Lombardy – Presidium launch date 2002

Bagòss is an uncooked curd cheese made from semi-skimmed raw milk, produced in the Caffaro Valley near Brescia.



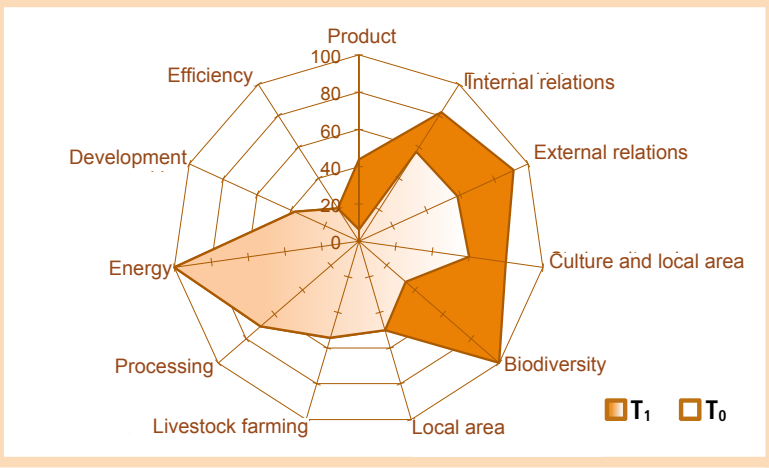


Bagòss is a product with strong local identity and was already of touristic interest when the Presidium was founded. Values of sociocultural sustainability have doubled due to strengthened external relations, expanded consumption, greater participation in decision-making by producers (now in a cooperative), support from local bodies and continuous growth in the role of young people (6 producers are under 35 years).

Agri-environmental sustainability has fallen slightly however, due to the ageing facilities which are now mostly climate controlled. Economic sustainability has increased, but only slightly: the selling price of the cheese has improved, the cooperative organizes shared commercialization opportunities, but the other results are low: the number of producers has dropped, quantities have not increased much and 80% of commercialization is still in the hands of refiners and dealers.

Béarn High Pasture Cheeses – France – Presidium launch date 2008

Shepherds from the three valleys of Béarn lead their flocks of sheep to the mountain pastures on the French side of the Western Pyrenees, where they produce traditional tomes, pressed raw-milk cheeses which can weigh over five kilograms, in small stone huts.

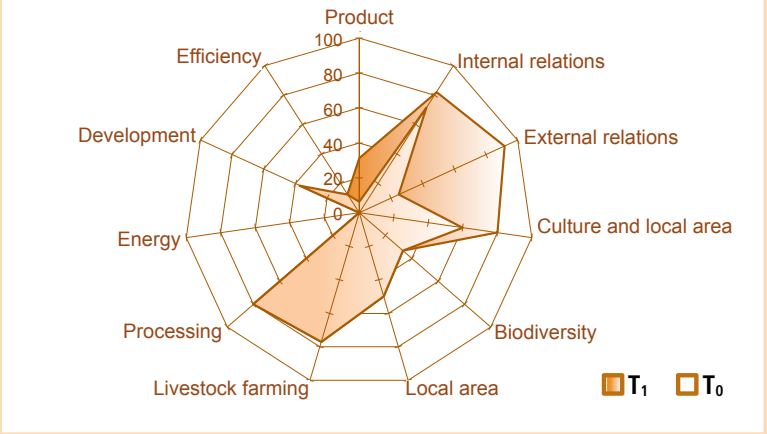


There are a number of positive components on the sociocultural scale: the significant role of younger producers (15 out of 50 are under 35 years) and women; training organized in recent years for cheesemakers; the role of the producer association, which has become increasingly important and recognized by local institutions and other associations (such as the EHA, the association of Basque herders); participation in various events; creation of a shared trademark, which has achieved a reputation with consumers. On the agri-environmental scale, initial sustainability was very high due to the work supporting native breeds and the mountain pastures, and the use of renewable energy (all the pastures have solar panels). The weak points of the agri-environmental performance are the use of corn silage for pregnant animals (which will gradually be eliminated) and the use of purchased rennet (work is under way to replace it with self-produced milk starter culture). No significant progress has been made on the economic level (no changes in the number of producers, quantities

produced, or sale prices), except for greater market diversification (it is now possible to find Béarn cheeses in some Paris restaurants and small quantities have been sold to other countries through the Slow Food network).

Bregaglia Valley Mascarplin or Mascarpel – Switzerland – Presidium launch date 2009

Every summer a group of small-scale farmers from the Bregaglia Valley, in Canton Graubünden, unites their goats into a single herd and takes them up to the Alpe Cavlòcc, where they make Mascarplin (or Mascarpel), a historic goat's cheese curdled using leftover whey from the previous day.



The biggest increase since the Presidium was started can be seen in the "internal relations" and "external relations" components. The producers have developed many new relationships, working with the local Slow Food convivium but also at a national and international level, emerging from the isolation that previously characterized this little-known, small and fairly inaccessible valley. They are now visited by groups of tourists interested in learning about and tasting the cheese, and they are working with the Slow Food Foundation to produce a narrative label. The national media have produced articles and reports and the producers have participated in events like Cheese in Italy and the Slow Food Market in Zurich.

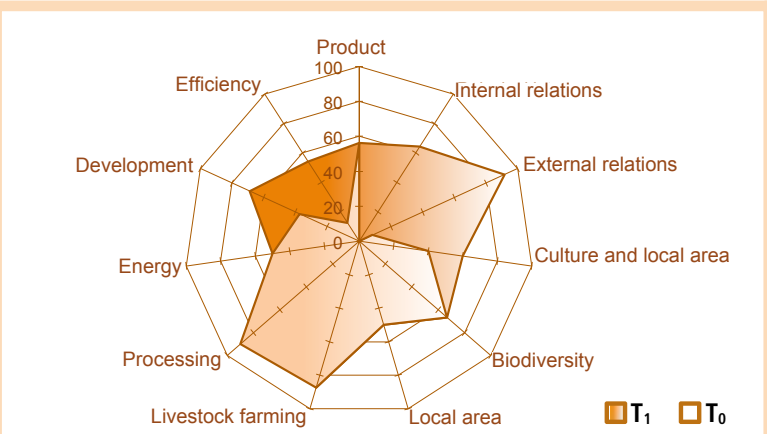
The producers' consortium, already established before the Presidium, has seen a small increase in the number of young people involved (a young woman has started making Mascarplin) and the number of women has also increased (currently eight women are involved in the farming and one of them is also the president of the consortium).

The "history, culture and link with the local area" component has a very interesting score, thanks to the Presidium's activities to protect the environment, rehabilitating the Alpe Cavlòcc pastures and the mountain dairy, which can now process the milk from the whole herd of goats.

The "product use" component is also positive. Before the Presidium the Mascarplin tradition was in danger of being lost; each farmer had only a small number of goats and the cheese was only being made domestically.

Brigasca Sheep Toma – Italy, Liguria – Presidium launch date 2004

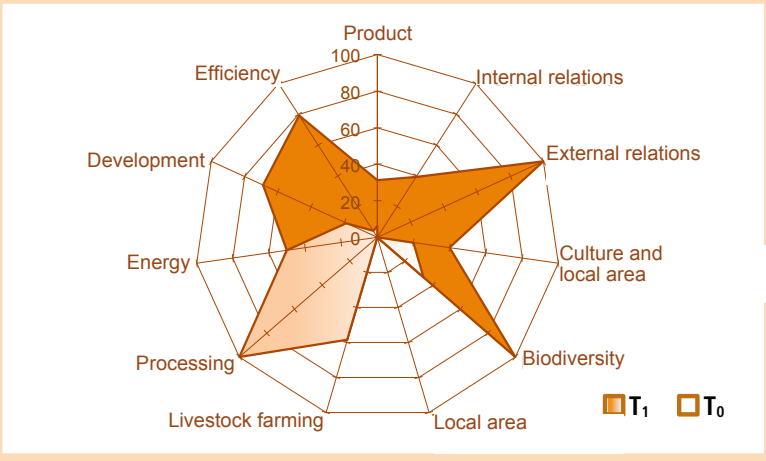
The Presidium promotes raw-milk toma cheeses made in the few remaining mountain pastures along the Italy-France border, and supports the crucial role of shepherds in safeguarding the natural environment.



The establishment of the Presidium has led to significant improvements in both the collective management of the project ("internal relations") and "external relations." The producers formed an association which meets regularly and decides on the different roles and participation in events and activities, including a series of training sessions organized in 2005 and 2007 by Slow Food.
The producers have improved local relationships with the regional livestock farmers' association and with the municipalities, as well as establishing relationships with the local convivia and other regional and national Slow Food groups. They have also hosted students from the University of Gastronomic Sciences on field trips. The scores for the "internal and external relations" components have therefore been excellent. They regularly participate in national and international Slow Food events, presenting their products to the public with proper labeling (previously not used) and holding cheesemaking classes for students and tourists.
Additionally, every year the cheesemakers practice transhumance, the seasonal migration of their flocks, which has recently been opened to interested tourists. They are contributing to preserving the culture of the product in the local area.
Currently production is around 40 quintals, compared to 10 when the project started. The producers have worked to improve their farms and constructed new workshops. The mountain pastures are now managed jointly, so as to increase the available surface area. The market has moved from being purely local to being 50% regional and also partly national. Significant increases have been seen in sales to food-buying groups, commercial businesses, fairs and events (40%). Excellent results are guaranteed by regular participation in the Cairo Montenotte Earth Market (25%). The price has increased (from 18 to 23-25 euros a kilo for retail). All of this falls within the "efficiency" and "development" components.

Bucegi Mountains Branza de Burduf – Romania – Presidium launch date 2007

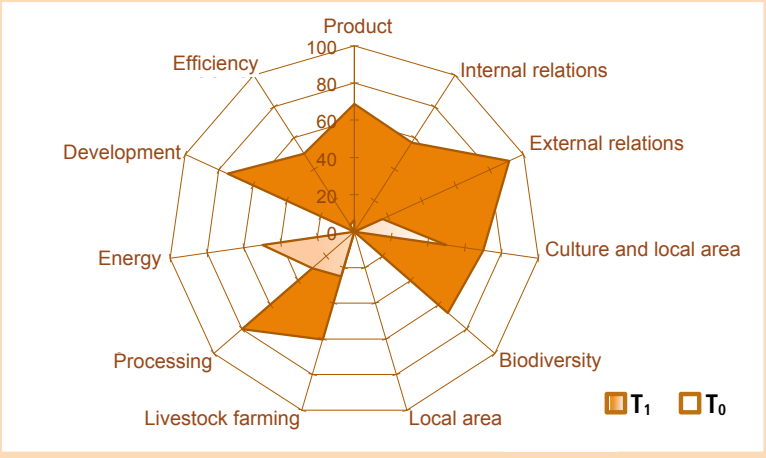
This iconic Romanian cheese is made by re-processing cas, a fresh sheep's milk cheese. After fermentation the paste is placed in containers made from pine bark or pig bladders.



The initial situation for this mountain cheese was very complex because none of the producers met regulatory requirements for production or sale. Values on the sociocultural scale have improved substantially: there is now a group of producers who communicate and discuss with each other, receive technical assistance from veterinarians, and sell cheese under a shared label. A shared aging facility has been renovated (duly registered with the local health authority) and the Presidium has good relations with public bodies.
The initial agri-environmental situation was already good (due to the sustainable methods and natural animal diet), but it should also be noted that this Presidium plays an important role in protecting the habitat and mountain pasture dairy production (which risked disappearing in the whole of Romania). The facility used for aging was renovated by the Presidium coordinator and made available to everybody; it is partly built into the rock of the hillside and also made of stone, so it is in harmony with the landscape. On the economic scale, the number of producers has risen (thereby acquiring negotiating power which previously did not exist), the quantity of product has increased (from 3 tonnes to 7.5), but most importantly, Branza de Burduf is now a recognized product which can be sold legally, both on the local market and at national and international events.

Cilento Cacioricotta – Campania, Italy – Presidium launch date 2002

Cacioricotta is a unique cheese made from goat's milk that is produced in the Cilento area. Its name reflects the method for coagulating the milk: partly using rennet (characteristic of cheese or cacio) and partly using heat (characteristic of ricotta).



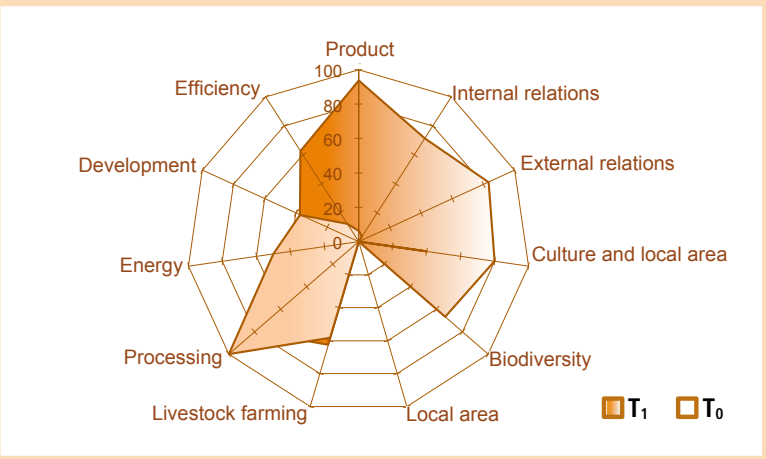
The sociocultural scale has recorded extremely high values due to the strengthening of internal and external relations, and particularly due to diversification in end uses: in the past it was mainly used as a grating cheese, while now it is more often eaten fresh due to new forms of preservation (cold storage).

Progress in agri-environmental sustainability has been small but significant: one producer obtained organic certification and a second has applied for it; some producers are raising local Cilento goats; all only use feed when essential (when grazing is not possible), and it is GM-free. A negative factor is the use of vacuum packing, also for preserving the product.

Economic sustainability has improved significantly. Before the Presidium the cheese was a family product and there were no producers meeting regulatory standards able to supply the market: now the Presidium producers (increasing from 3 to 6) have a compliant workshop and ageing facilities. Quantities sold have increased considerably (from 0 to 21,000 pieces), with an expansion of sales channels (cacioricotta is sold throughout central and southern Italy, with some supply also to the north). However it is difficult to increase the size of flocks and pastures due to the limits imposed by the Cilento National Park.

Coazze Cevrin – Italy, Piedmont – Presidium launch date 2000

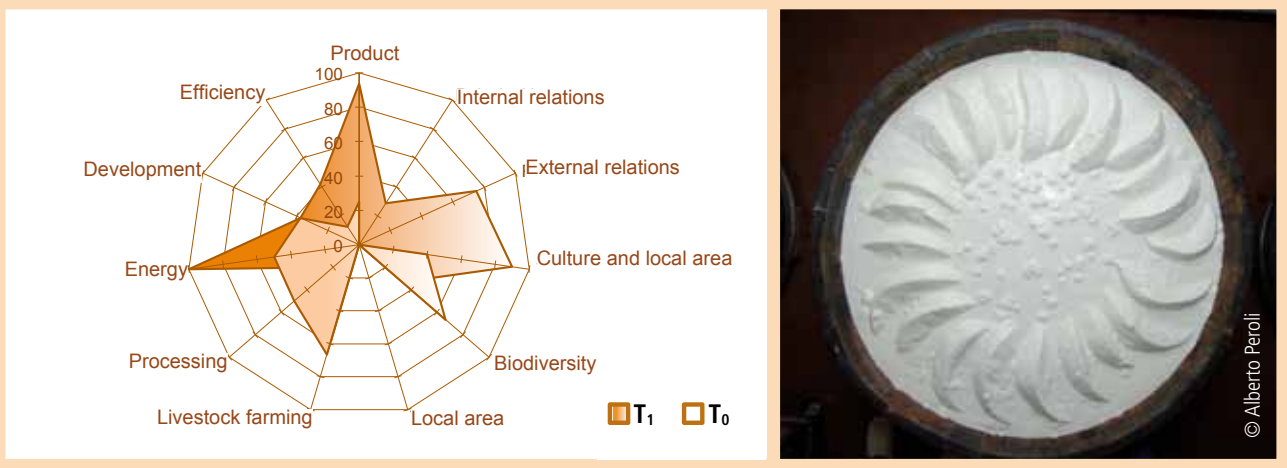
The Presidium has promoted a traditional cheese made from a mix of goat's and cow's milk, organized the reclamation of traditional aging facilities and preserved the native Barà-Pustertaler cattle breed.



Cevrin has obtained positive economic results (regional and national distribution, increase in agreements with intermediaries and restaurants, sales price increased from 8 to 20 euros a kilo), reflected in a high score for the "efficiency" component. But the most interesting results can be seen in the "product use" component. The Presidium has helped producers to preserve the original flavor of Coazze Cevrin, contributing to raising awareness among the public authorities and helping the producers obtain exceptions from the laws regarding aging environments. The Presidium has encouraged

the diversification of products, with the production of ordinary cheeses and dairy products like tomini and ricotta joined by the return of a historic quality cheese. Its traditional sensory quality has been preserved thanks to the enforcement of a strict production protocol and consumers have been educated about this fascinating example of dairy biodiversity during many tastings and promotional events.
The Presidium has helped promote the Coazze and Giaveno area and increase tourism and educational activities. Now many people come to the market in Giaveno, a small town near Turin, just to buy the cheese, previously only sold locally. The Val Sangone has reaffirmed its specific cheese-producing identity ("history, culture, link with the local area" component). Important work has been done in bringing together the producers, shown in the high score for the "internal relations" component: An association has been created and the producers collectively manage events, sales, communication and even bureaucratic issues. The producers often meet other cheesemakers and regularly host other Presidium producers from Italy and abroad during the many exchanges organized by Slow Food. As well as the increase in external relations, due to a higher profile with institutions and the media and participation in many events, it is also worth noting the good result in the "biodiversity" component. The producers are preserving a native cattle breed, the Barà-Pustertaler, and have renovated an old aging facility.

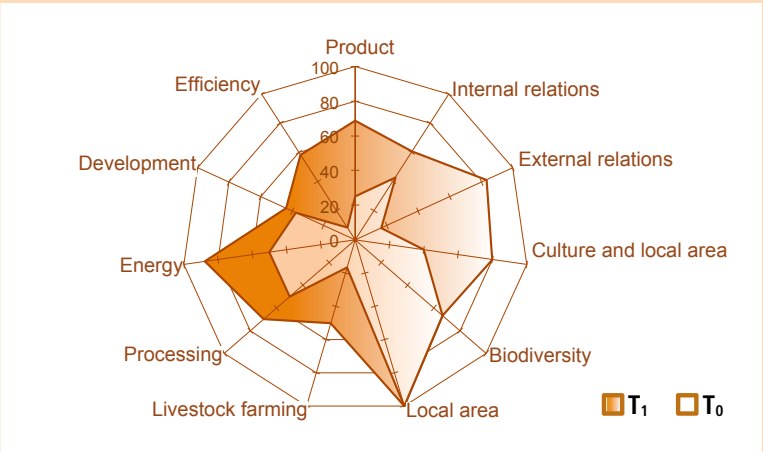
Formadi Frant – Italy, Friuli Venezia Giulia – Presidium launch date 2006
Formadi Frant is made by taking other aged and fresh cow's milk cheeses, made from semi-skimmed or raw milk, and mixing them with cream, salt and ground pepper. The cheese comes from Carnia, one of the most unspoiled natural environments in the whole Alpine range.



The Presidium wanted to promote and encourage traditional production, with the aim of adding value to the artisanal product and protecting it from imitations. The positive results obtained can be seen in a marked improvement in the socio-cultural scale, with the score tripling from when the Presidium was started.
External relations have improved thanks to the participation of the producers in Slow Food's major events in Italy, as well as regional and local events organized by convivia. The product's visibility has increased thanks to good media attention, with national radio programs, TV reports and newspaper articles on Formadi Frant.
The link with the local area has strengthened thanks to the renovation of a mountain dairy (Pozof, on Monte Zoncolan), which now welcomes tourists and students, who can take part in educational activities and follow guided plant-identification walks.
Some of the environmental scores have not shown such a high increase over time, because they were already elevated before the Presidium was started. For example the traditional processing techniques were already highly sustainable before the Presidium. The increase in the "energy" component, however, is considerable, thanks to the introduction of systems for producing renewable energy (solar panels and photovoltaic systems).
Though the number of producers has not increased from the original three, and the quantity of Formadi Frant produced each year has remained at around 75 quintals, the identification of new commercial channels has led to a growth in economic sustainability ("efficiency" component). The product is now known not only locally and regionally, but also nationally and to some extent even internationally. This has led to the final price increasing by over 5 euros per kilo.

Tuma Macagn – Italy, Piedmont – Presidium launch date 2002

Named after the Alpe Macagn, at the foot of Monte Rosa, north of Biella, this cheese is made year-round from fresh, full-fat, raw cow's milk. The summer version is made up in the mountains, while the winter version is identified with the brand "di cascina" (from the farmhouse).



The values for the socio-cultural scale are excellent, thanks to the important advances made over the past few years. In 2012 the producers created the Associazione Presidio del Formaggio Macagn, and this association means they meet regularly, giving them greater awareness and decision-making power. Internal relations have improved too, thanks to the participation of young producers, who are learning the secrets of the craft from the older members of their families. External relations have increased, particularly due to the participation of the producers in numerous initiatives, excellent relationships with the Slow Food network and the significant media attention the project has attracted.

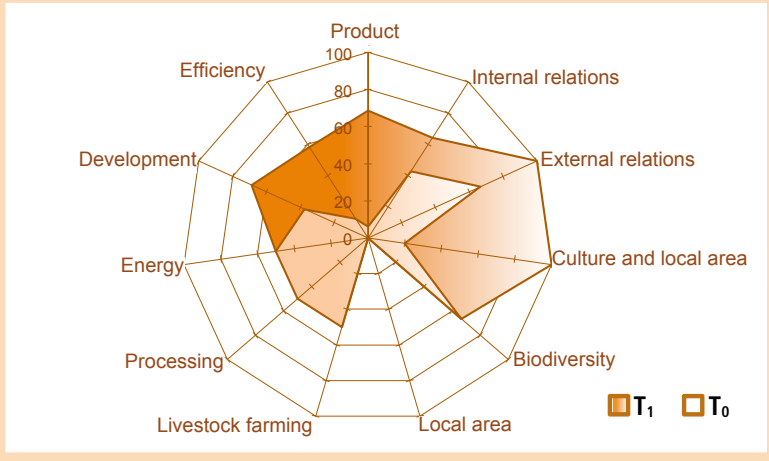
An overall improvement has been seen in the product's sensory quality. This is thanks to the introduction of a production protocol, which each producer or ager who belongs to the Presidium must commit to following. The protocol has imposed restrictions in order to better protect consumers from the non-Presidium products commonly found on the market.

The economic scale has also seen an increase. The final price has tripled, output has increased and the producers have invested in renovating an old mountain dairy, building a new mountain dairy and other commercial activities (such as holiday farm and a cheese shop). Additionally, Macagn consumption has expanded regionally (50%) and nationally (25%) and new markets are being identified; the cheese is now sold at fairs, in shops and to restaurants.

The agri-environmental scale has improved, particularly the "energy" component, with the adoption of renewable energy systems (hydroelectric turbines and solar panels). Letting the cattle graze freely helps preserve the mountain environment and the score for animal farming has improved thanks to a refinement of traditional practices. In particular, industrial feed blends have been replaced with natural mixes. Silage and GMO feed are not used, and 80% of the animals' diet is produced on the farm.

Malga Monte Veronese – Italy, Veneto – Presidium launch date 2004

The Presidium united the dairies willing to produce aged Monte Veronese using mountain-pasture milk. The cheeses are marked with an "M" for "malga" (mountain dairy) branded on the rind.

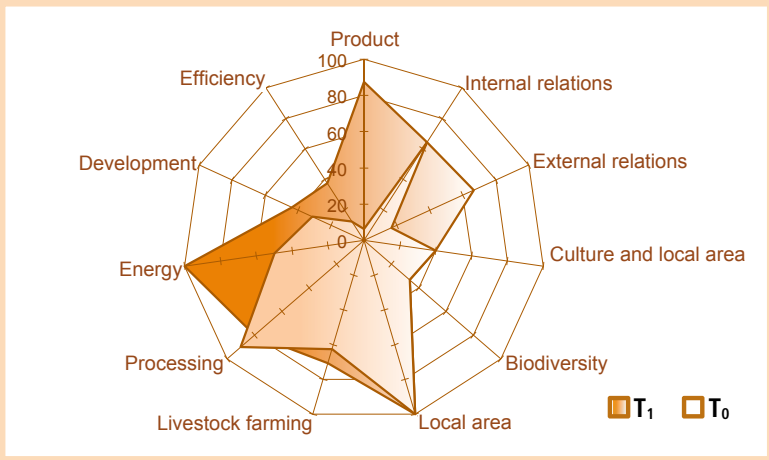


The Presidium's best results can be seen in the identification of the product with the local area and in the protection of the landscape. In fact, one of the Presidium's objectives was the revival of cheese made in the mountain dairies, helping to halt their gradual abandonment. Today the value of mountain-dairy cheeses is recognized locally and their production has become profitable. Some of the mountain pasture buildings have begun to be renovated and other unused mountain dairies will hopefully be salvaged. The dairies have become a local tourist attraction, helped by their tradition of serving food. In some cases the Presidium organizes guided tours with tastings for tourists.

In the last four years, all of the Presidium producers have expanded their businesses, building aging facilities, new workshops, sales points and tasting spaces. As a result the Presidium has improved its "efficiency" score. This work has been done to meet the needs of the Presidium as it grows: new commercial channels have been opened (supermarket chains, restaurants, Earth Markets, food-buying groups) and distribution is no longer solely local and regional, but also national (15%) and international (5%). Thanks to the Presidium, alliances have been established with intermediaries like the local supermarket chain Cadoro. The success has also been the result of improved product quality (extended aging, appropriate hygiene, cheesemaking without using commercial starters), reflected by the score for the "product use" component. It is worth noting that this has been possible thanks to the improvement of training and knowledge sharing within the group of producers ("internal relations" component).

Moena Puzzone – Italy, Trentino Alto Adige – Presidium launch date 2001

The Presidium cheese is made from milk from cows that graze at altitudes as high as 2,400 meters above sea level. During aging, each cheese is regularly turned and washed, giving it its typical fragrance.

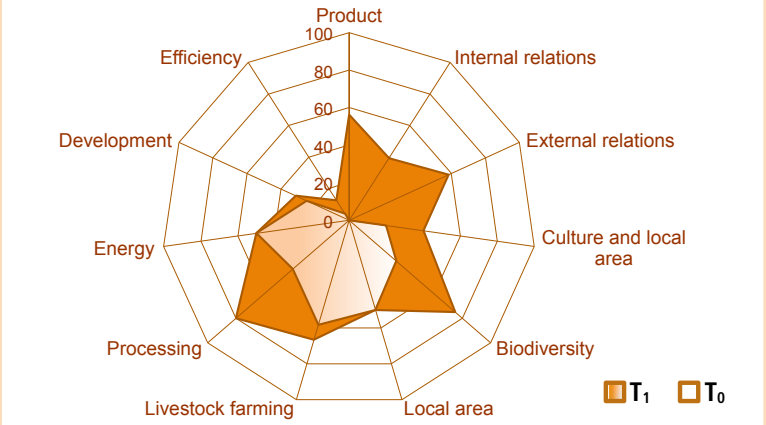


The most obvious improvement came in the "product use" component. The Presidium was started to bring back the original characteristics of Moena Puzzone, and most importantly to differentiate and add value to the cheeses made in

mountain dairies. Thanks to the Presidium's promotion, there is now greater appreciation of the value of aged Puzzone. It improves over the months (the protocol states the cheese must age for at least three), becoming truly noble. The formation of the Presidium also led to the renovation of the Caseificio's aging facility. An important achievement in energy sustainability ("energy" component) was the introduction in 2012 of a solar power system for the dairy. Careful differentiation of waste has been practiced for the last eight years.
In general, the level of "external relations" for the Presidium has improved greatly, thanks to participation in Slow Food's international events; attention in the local and national media including appearances on national television programs and the involvement of local authorities in providing technical and financial support to cheese production.
This has led to an increase in output (from 1,500 to 2,000 cheeses every year) and wider distribution of the product. Previously it was found only on the local market but now it is distributed regionally and nationally, with an increase in sales to supermarket chains, shops and restaurants. Before the start of the Presidium, 50% of production was sold directly from the dairy. Obviously, the price has risen too, increasing from 6 to 10 euros for wholesale and from 10 to 16 euros for retail. These aspects are reflected in an increase in the "efficiency" score.

Motal – Armenia – Presidium launch date 2005

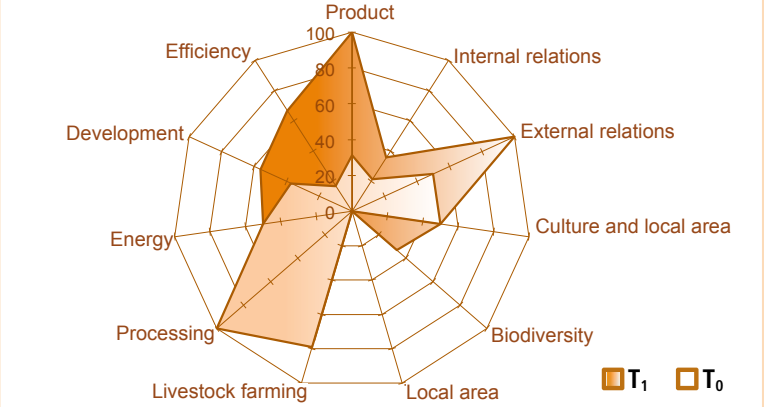
This distinctive cheese is made from goat's milk and wild herbs in the Armenian mountains. The broken-up curd is pressed into terracotta vessels, which are turned upside down on ashes for two months, then sealed with beeswax.



This Presidium has achieved progress on the sociocultural scale, primarily because it has recovered a traditional cheese aging method that was disappearing (aging in terracotta jars). It has also successfully brought together producers who had no previous relations with each other (though a formal association has not yet been created), spread knowledge and consumption of the product and organized numerous training activities (particularly on managing animal health).
There have been no significant improvements on the agri-environmental scale, except for greater attention to animal diet and welfare.Values on the economic scale are still limited due to the low number of producers and animals, but a significant milestone should be noted: aged motal in terracotta had almost disappeared and was not commercially available, while now it can be found on the regional market at various events and in some restaurants.

Mountain Pasture Castelmagno – Italy, Piedmont – Presidium launch date 2005

Castelmagno is one of Piedmont's most important cheeses, documented as far back as the 12th century. It is made in the Val Grana, which still today boasts an unspoiled environment of pastures rich in a variety of grasses, herbs and flowers.

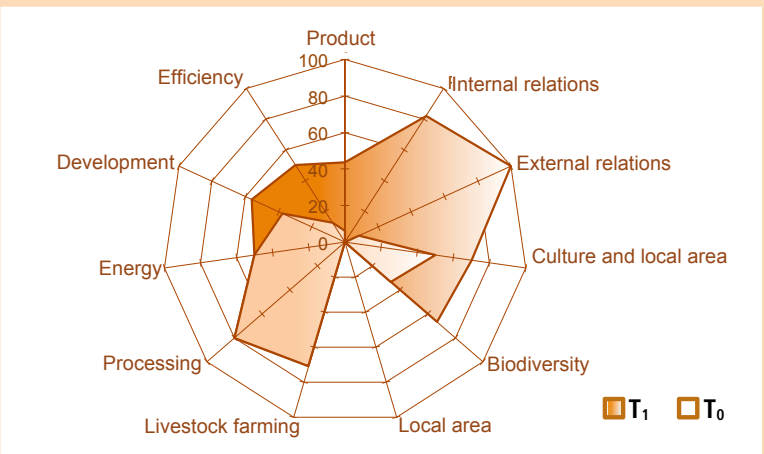


The Presidium was started because the Castelmagno commonly found on the market lacked the cheese's original characteristics. To bring back Castelmagno's historic flavor, Slow Food interviewed elderly producers and revived the traditional techniques, uniting a number of producers and an affineur in a Presidium.

The cheese is produced during the grazing period, in mountain pastures at altitudes of up to 2,400 meters. The cheeses are then aged for at least 120 days in a shared natural aging facility. This explains the high value from the start for the "processing " component. Sociocultural sustainability has seen an increase over the years, and unsurprisingly the "product use" and "external relations" components have high scores. Media attention towards the cheese has increased since the start of the Presidium, and many local, national and international TV programs and articles have been dedicated to mountain-pasture Castelmagno. The producers have developed excellent relationships with restaurateurs and enthusiasts, and participate in events organized by Slow Food and other important food and wine events in Italy and the rest of Europe. The sales price for Castelmagno, which in the past had fallen to 8 euros a kilo, has now increased considerably, and the producers can make a fair income. Commercial channels have been diversified and the market has expanded, with the cheese now traveling as far as San Francisco and Saint Petersburg. All of this has influenced an increase in the Presidium's economic sustainability, shown by the positive score for the "efficiency" component.

Orobiche Valleys Traditional Stracchino – Italy, Lombardy – Presidium launch date 2010

This Presidium was started to promote stracchino made in the traditional way, following the process that developed over past centuries in the Taleggio, Serina, Imagna and Brembana valleys of the Orobie Alps. These days the cheese is better known in its industrial version, generically called Taleggio, made with pasteurized milk and commercial starter cultures.



The Presidium intended to promote and return to the market a little-known cheese, still made by a few farmers and cheesemakers who process fresh raw milk every day. Their cows graze in the local pastures as long as the climate allows it, and

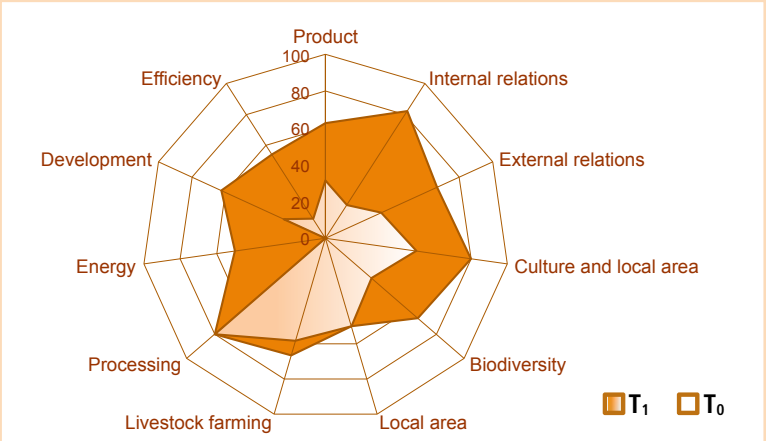
the Presidium is planning to start collectively buying feed for the winter months. Using the warm, freshly milked milk is hard work for the producer, and only small-scale cheesemakers can maintain this practice. Very few cheeses are still made this way, and therefore it is very important to preserve them. This is why the Presidium had a high score for the "processing" and "animal farming" components at the start. The decision to primarily rear Bruna Alpina cattle helped raise the score for "biodiversity."

However, the most important score can be seen in the "internal relation" and "external relations" components. The Presidium has involved 16 producers in an association, which meets almost every month. It is generally the women who make the cheese. The role of the elderly is recognized, and was fundamental to launching the Presidium. The local authorities are very active in both supporting the producers and organizing training for them. The Presidium was involved in the "Prìncipi delle Orobie" project, along with two other local Slow Food Presidia (Heritage Bitto and Valtorta Agrì).

Distribution has increased nationally and internationally, thanks to the Alliance project linking chefs and Presidia and the producers' participation in various Slow Food events. It used to be the distributors who dominated the market, but now the cheesemakers, working together, have managed to obtain a better price (reflected in the "efficiency" component).

Pistoia Mountain Pecorino – Tuscany, Italy – Presidium launch date 2000

In the mountains around Pistoia, some families of shepherds and cheesemakers still make pecorino like it was done a century ago, using raw milk and natural rennet. Their herds of Massese sheep, a local breed with shiny black fleece and dark spiraled horns, are grazed on mountain pastures.



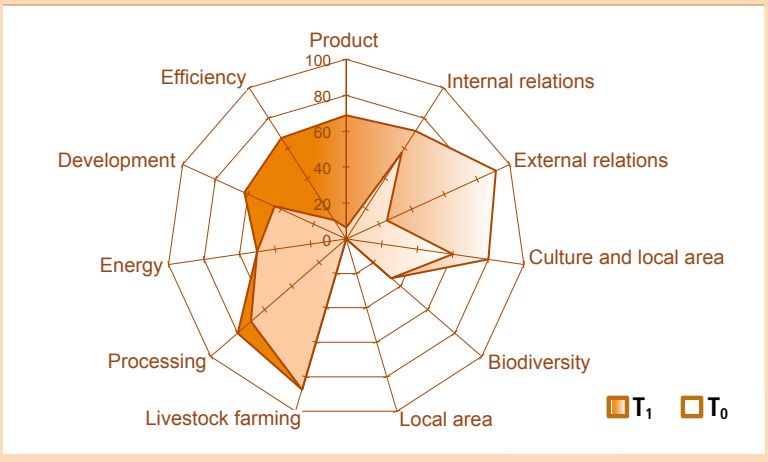
The progress in overall sustainability is evident. The economic and the sociocultural scale have doubled their levels while the agri-environmental scale has made less progress, partly because it already started from a good position. The Presidium has maintained the initial situation and also undertaken initiatives to protect biodiversity and develop renewable energy systems by installing solar panels on the roofs of many sheds.

Some firm decisions need to be taken regarding animal diet and cheese production. On the sociocultural scale, the introduction of new processing methods has helped diversify the product and the entry of new young producers has enabled better organization and boosted external relations. The president and vice president of the consortium for herders and producers of Pistoia Pecorino are both women, which is unusual in the sector.

On the economic scale, increases in land area (from 2,000 to 2,500 hectares), production quantities (from 1,000 to 1,400 tons) and farm expansion, particularly new sheds and dairies, have helped to significantly increase sustainability. It has also benefited from greater market diversification: previously 80% of the market was local, and national and in particular has managed to enter the restaurant market with 20% of production. The negotiating power of producers has also increased.

Raw Milk Vacherin Fribourgeois – Switzerland – Presidium launch date 2008

This traditional mountain cow's milk cheese was at serious risk of losing its sensory characteristics. The Presidium producers make it without commercial starter cultures, using raw milk, and age it for at least three months.

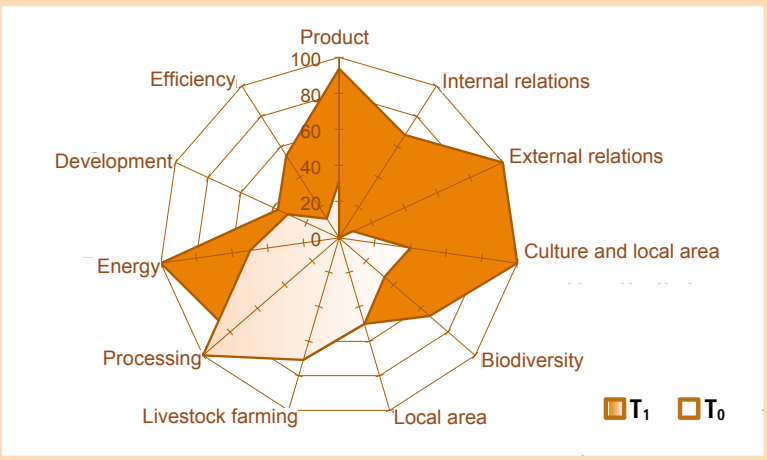


The Vacherin Presidium has played an important role in improving the quality of production and aging, clearly seen in the graphic in the "product use" component. The Presidium producers use only raw milk, mostly produced in the summer by their animals as they graze in the mountain pastures. When this is not possible, they use milk from farms no more than 5 kilometers from the dairy. Thanks to the cooperative they belong to and the Presidium, the producers have opened a collective aging facility. Considering that raw-milk Vacherin represents 2% of total PDO Vacherin Fribourgeois production and that it is hard to find cheeses aged for more than three months, the results obtained with the Presidium are very significant. The Presidium has helped promote this illustrious cheese outside its local area, particularly in German-speaking Switzerland, France, Germany and Italy. This is reflected in the "efficiency" component. Currently the national and international market make up 43% of sales, while before the Presidium these markets were almost non-existent. This significant increase is due to collaboration with intermediaries in the big cities and sales through supermarket chains, which have become very important. The price has increased from 10 to 16 Swiss francs per kilo.

These positive figures have been made possible by the opening of a collective aging facility and the quality improvement brought about by the Presidium, which convinced the producers to stop using commercial starter cultures, and the considerable increase in the "external relations" component, thanks to relationships with local associations, events organized by the local convivium, international Slow Food events and articles and reports in the media.

Saras del Fen – Italy, Piedmont – Presidium launch date 2000

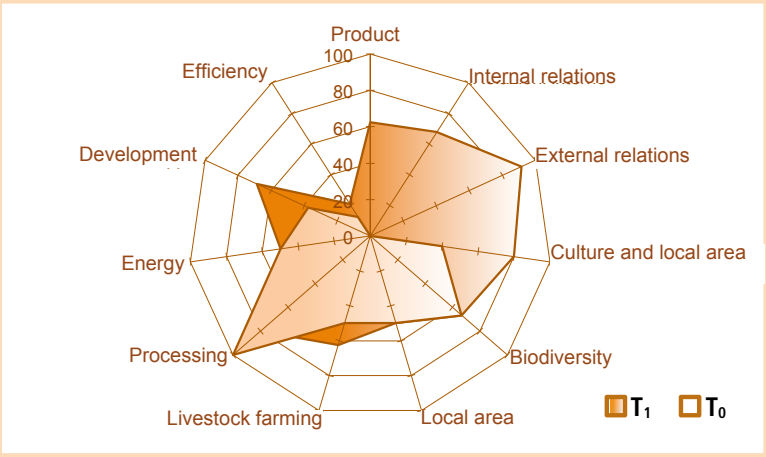
Saras means ricotta in local dialect. The tradition of wrapping this cheese in hay (or fen in Piedmontese) came from the need to transport it down from the pastures of the Pellice Valley.



Sensory quality has improved due to more effective methods of preservation. Many young people have continued their parent's work; relations between producers have strengthened as a result of the Presidium and also the significant promotional

work for local products carried out by the Turin Provincial Authority; the Presidium has its own association and a trademark. Relations with local bodies are also good, particularly with the local mountain community. All this has helped to improve sociocultural sustainability.
Agri-environmental sustainability has improved significantly due to the introduction of renewable energy systems (solar panels and photovoltaic systems in the mountains), continuation of transhumance and good management of herds during winter (when animals receive a good diet).
Although there has not been an increase in the number of animals or herders, new commercial channels have helped to significantly increase economic sustainability. Saras has particularly benefited from the creation of many producer markets. This is perhaps one of the Presidia where the interactions between Slow Food, local public bodies, producer associations and marketing specialists have been most effective. The development of new ways of presenting Saras, particularly through the efforts of well-known chefs, has been of considerable benefit, and the cheese is now widely used around the province. Profitability has also improved.

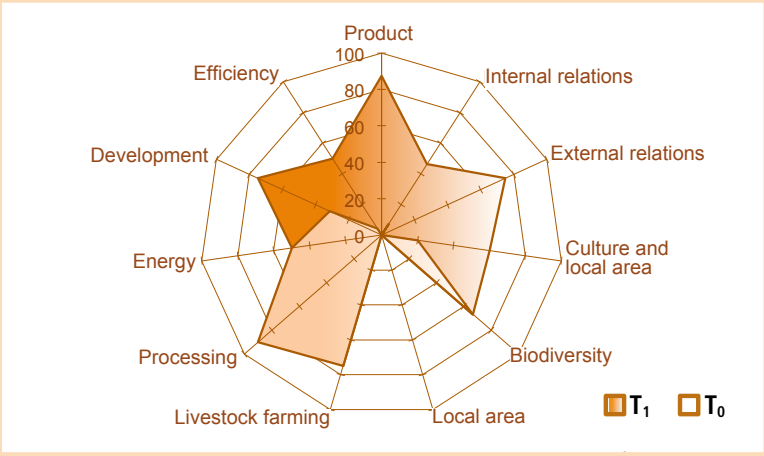
Saviore Valley Fatulì – Italy, Lombardy – Presidium launch date 2007
In the Saviore Valley, within the Adamello mountain range, a handful of farmers still rear an ancient goat breed, the Bionda dell'Adamello, and use its milk to make small cheeses called Fatulì.
This Presidium shows excellent values on the socio-cultural scale, thanks to the strengthening of internal relations (the



creation of an association, the greater involvement of young people and the important role played by women), external relations (collaborations started with the Camonica Valley Mountain Community and the Adamello Regional Park, participation in numerous events, media attention) and the link between the cheese and the Saviore Valley's local culture and environment. The care for the landscape means good scores on the environmental scale too. Thanks to the Presidium, two Alpine dairies have been preserved and the producers who take their herds up to graze in the mountains tend the pastures and the woods. The "biodiversity" component has a reasonably high value, thanks to the work to revive the Bionda dell'Adamello goat breed, though the risk of extinction has still not been averted. Particular progress has been made by the Presidium in reintroducing and protecting the traditional processing technique (the component with the highest score). The producers have started to focus more on aging and smoking over juniper.
The economic scale has a positive score for the "development" component, thanks to the quantity produced, which has increased from a few quintals to 50; marketing (previous sales were sporadic and the cheese was only sold from the farm, while now it can also be found in shops and farmers' markets); and price (the retail price used to be around 12 euros a kilo, but now it ranges from 25 to 28 euros). The number of producers has fallen slightly.

Tcherni Vit Green Cheese – Bulgaria – Presidium launch date 2007

A traditional veined sheep's cheese, one of the very few natural veined cheeses in the world, is made in the mountain pastures of the Stara Planina massif and protected by a Presidium.

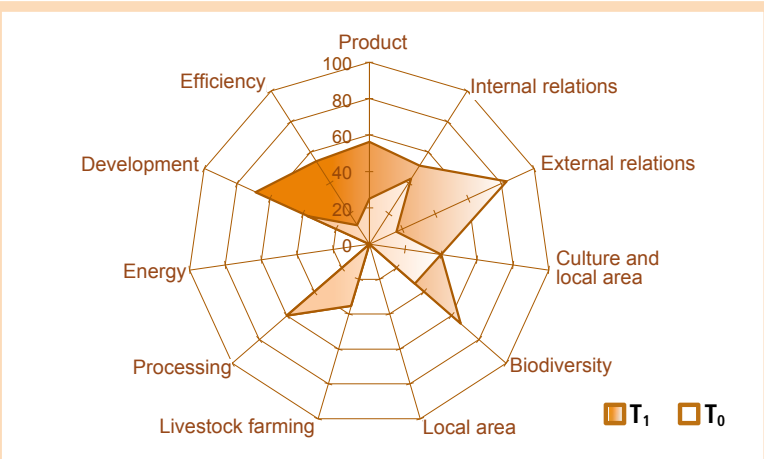


Some scores (regarding farming and processing) were already high before the Presidium was started because the Cherni Vit Valley has a tradition of livestock farming (particularly of goats, which spend the summers in the mountain pastures) and producing a brined white cheese. The veined version of this cheese, made by a few elderly cheesemakers, has however been a discovery of Slow Food. Veined cheeses are prized around the world, but naturally produced ones are very rare. The cheeses that developed green veining, caused by the microclimate and aging in wooden boxes, used to be ignored and considered worthless. The Presidium has worked to refine the veining and aging process, providing technical assistance and supporting the creation of a facility for aging the cheeses (which explains the high score assigned to the "product use" component). The values for the socio-cultural scale (internal and external relations; history, culture and link with the local area) are also positive: The Presidium has been promoted nationally and internationally, becoming a symbol of Slow Food's struggle to protect biodiversity and traditional food-processing methods in the Balkans. The inhabitants of Tcherni Vit are now aware of the importance of their cheese and their traditions. They have set up a Slow Food convivium and organized the opening of a small Earth Market.

The scores for the economic scale are lower because of Bulgarian legislation, which does not protect artisanal production and restricts the Presidium from growing and finding national and international markets. Despite this, cheese production has gone from almost non-existent (a pair of elderly cheesemakers) to a group of five producers all aged around 40.

Valtorta Agrì – Italy, Lombardy – Presidium launch date 2010

Agrì is a small, cylindrical, cow's milk cheese, usually eaten fresh. To make it, the curds must be mixed with great skill, and few cheesemakers in the Valtorta, in the province of Bergamo, still possess this talent.



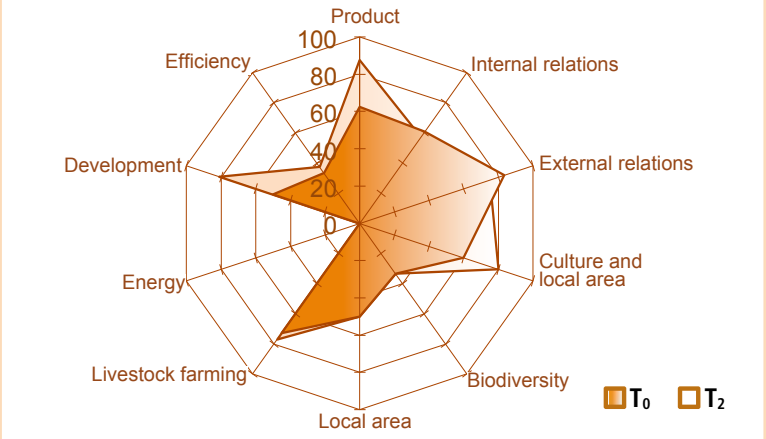
In recent years the agrì produced in the area was mostly consumed at home by the cheesemakers, and the small Valtorta dairy, which collects milk from a dozen farms in the valley, produced very limited quantities. The Presidium has increased

the value of agrì, and currently two types are produced, one fresh and one aged. The aged agrì is proving highly successful, and the differentiation between the two product lines is reflected in a good score for the "product use" component. The increase in the quantity produced, the more profitable price (the fresh cheese has increased from 18 to 20 euros a kilo while the aged sells for 30 euros a kilo) and the increased distribution on the market and international sales (Netherlands and Poland) contributed to a very high score for the "efficiency" and "development" components.
However, the greatest success can be seen in the socio-cultural scale, particularly in the "external relations" component. The Presidium has attracted much media attention to the area and to the cheesemakers, who regularly participate in fairs and events in Lombardy and other regions. Internal relations are also excellent; the knowledge of the elderly has been safeguarded and is being passed down through the generations. Today two young people, a man and a woman, work in the cooperative that unites all the local farmers and protects the valley's local food culture.

Breeds

Alpago Lamb – Veneto, Italy – Presidium launch date 2000

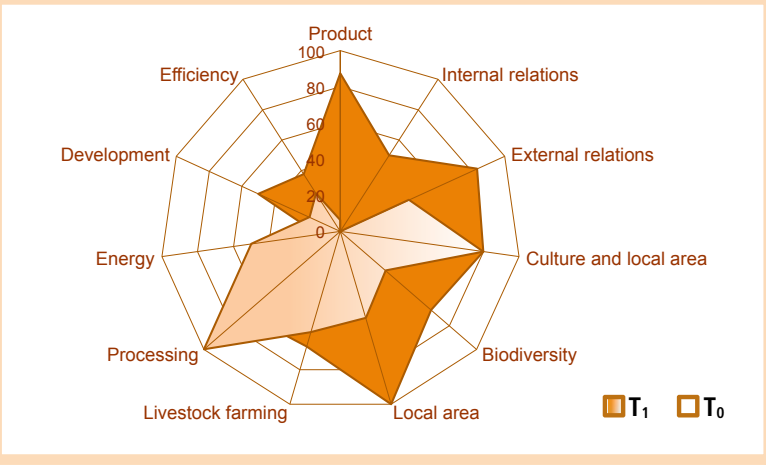
A small to medium sized native breed with no horns and tiny ears, Alpago lamb is raised free or semi-free range. The meat is extremely tender with just the right balance of fat and lean, and distinct notes of aromatic herbs.



Values on the sociocultural scale have increased due to diversification in the product's uses (clothing has been developed with Alpago wool) and a strengthening of internal relations between herders, who are united and work within the association (young people are also present, and one of them has also become an advisor in the association), as well as benefits from wide-ranging external relations created by Slow Food with its international network and network of the Alliance Between Chefs and Slow Food Presidia.
The use of pastoral farming and transhumance was a decisive factor in increasing agri-environmental sustainability, offsetting the negative effect of adopting low-sustainability packaging (non-biodegradable vacuum packed film).
The significant rise in economic sustainability was mainly due to market diversification: from being an exclusively local product around Alpago (a few towns near Belluno), communication work by well-known chefs enabled Alpago lamb to cross provincial boundaries, and is now recognized as one of the best lamb breeds in Italy. Promotional work has been excellent, with the lamb being used in Italian (and also international) restaurants. The organization of producers in the Fardjma Association, joined by chefs who have promoted the breed, has strengthened following the creation of a marketing cooperative. It has made agreements with a large number of retail outlets and is also promoting wool in collaboration with a traditional local wool mill. Recently, there has been a slight decrease in both the price and the total area used to raise the lamb, causing a decrease in the values of "efficiency" and "development" compared to a few years ago.

Nebrodi Black Pig – Sicily, Italy – Presidium launch date 2002

Raised in a semi-wild and wild state in the beech and oak forests of the Nebrodi Mountains, this small, black breed of pig is frugal and hardy. However it has seen numbers drop considerably in recent years.



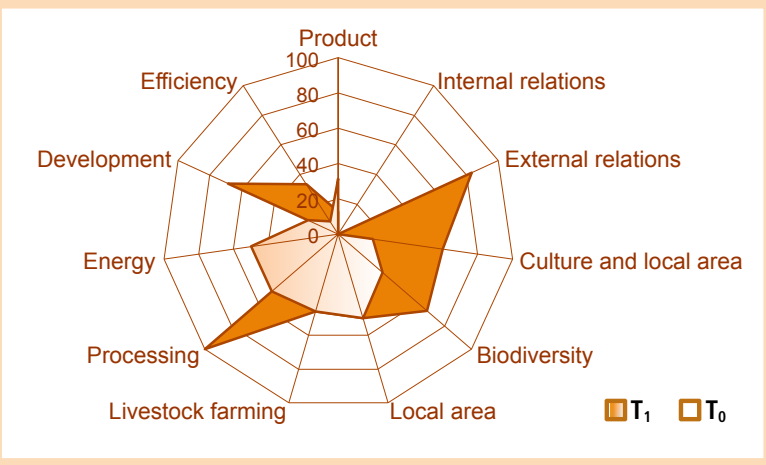
The increase in sociocultural sustainability is a result of intense efforts to improve processing methods in order to achieve higher quality standards. Values on the agri-environmental scale have not shown a significant upturn because work to recover the breed and revive traditional methods was already under way when the Presidium was created. Some values are still rising because the Presidium is in the process of implementing improvements (building structures from stones and branches for night shelter and sows, feed trials using cereals and legumes in varying proportions to establish an ideal diet for optimum quality).

Values on the economic scale have risen as a result of new facilities for processing and a shared building for ageing hams (following a contribution from the Sicily Regional Authority), an increase in the number of animals slaughtered (from 1,500 to about 4,500 per year) and number of farmers (before the Presidium there were only small low-profile farms; there are now 3 processors and farmers with another 3 as backup, who make up the number of animals needed for processing), as well as increased quantities of product and a more profitable price.

Cured meats

Conca Casale Signora – Italy, Molise – Presidium launch date 2003

Signora is a traditional country sausage from Conca Casale. A coarse-textured raw salami seasoned with wild fennel, it also has notes of citrus that come from washing the bladder casing with water and lemon juice. The meat is hand chopped and then stuffed into the casing by hand.

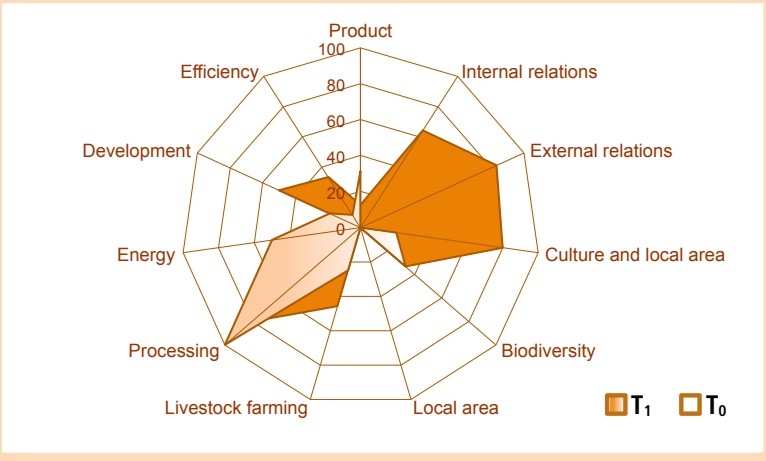


The sociocultural scale has recorded a significant increase due to increased relationships with the Slow Food network and consumers, but is penalized because the traditional method of preservation in oil or lard has been abandoned. The agri-

environmental scale is negatively affected by the use of vacuum packing, but positively impacted by the fact that the one Presidium producer extended his activities to farming (raising pigs), thus closing the production chain.
Economic sustainability is penalized by the situation of having one producer only, and no new ones joining. On the positive side, before the creation of the Presidium this sausage survived only through the knowledge of a few old people and it had completely disappeared from the market. Now the Conca Casale Signora is sold at a profitable price, and the producer has modernized facilities. There has been an increase in the number of animals and in the quantity of sausage produced (from a just a few to 250 per year).

Gioi Soppressata – Italy, Campania – Presidium launch date 2002

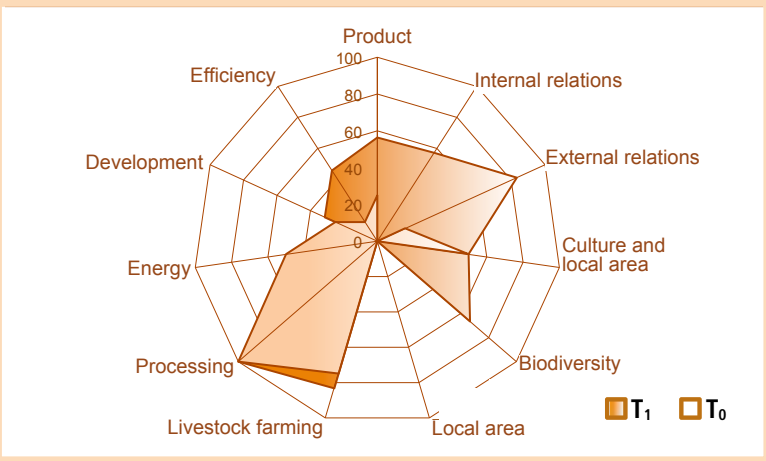
One of the oldest cured meat traditions from Campania, this salami is made from the finest cuts of pork, finely chopped, seasoned with salt and pepper and encased in pig's intestine. A piece of lard is inserted into the middle of the salami.



Values on the sociocultural scale have risen due to improved internal relations (meetings among producers) and external relations, supported by the Slow Food network (the Presidium participates in numerous events in Italy). Soppressata is a significant attraction for tourists visiting the Cilento region. The fall in agri-environmental sustainability is mainly due to the introduction of vacuum packing for ageing and packaging, which has replaced traditional methods of preservation in oil or lard (this has negative effects both on the agri-environmental and the sociocultural scale). An increase in the number of animals slaughtered and in the quantity of product (from around 400 to 850 pieces per year), an increased number of producers (from 2 to 3), together with new commercial outlets have resulted in a significant improvement to the economic sustainability scale.

Locarno Valleys Cicitt – Switzerland – Presidium launch date 2005

Until the 1950s, goats were common in Canton Ticino, and the meat, fat and heart of locally raised goats was used by a few small-scale farmers to make a traditional sausage called Cicitt.

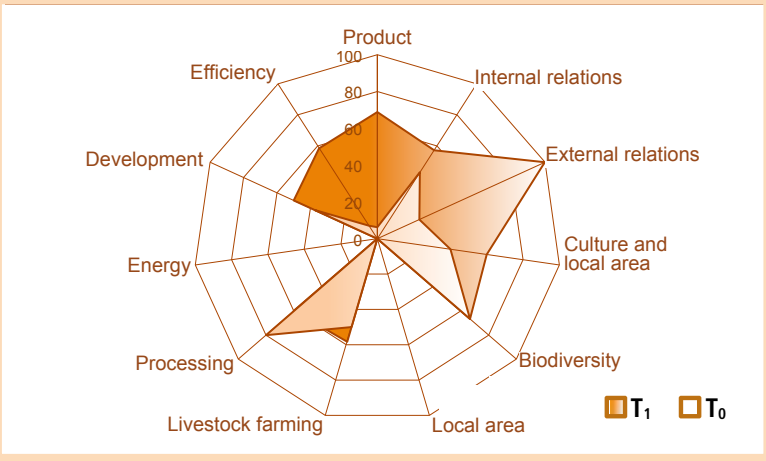


The analysis shows very positive results for the "internal relations" and "external relations" components. An association of Locarno Cicitt producers was created when the Presidium was started, ensuring that the project was managed collectively

and decisions were shared.
The role of the producers within the community has also changed. Now a number of them participate actively in managing the local environment, playing leading roles in local organizations. The producers are working to revive the area's traditional goat breed, the Verzasca.
The producers have participated in national and international events—Salone del Gusto and Terra Madre in Turin, Porco ma Buono in Parma and Slow Food Market in Zurich—obtaining a good level of media attention, including outside the canton. Great results have been achieved in "biodiversity": The Presidium has been promoting the return of the Verzasca breed and the number of animals has grown over the years.
The production protocol has established some points that have helped raise the score for "product use." The protocol specifies the recipe for authentic, traditional Cicitt, as opposed to the overly refined versions often found on the market, which include pork in the ingredients and risk causing the traditional flavor to be forgotten.
A substantial increase in the score for the "efficiency" component is related to the increase in production. New farms have been started and the market for the product has been expanded, with particular interest from restaurants and Swiss Slow Food members. The sales price has also increased, from 15 to 40 Swiss francs, and the commercial channels have been diversified, with the Cicitt now sold to food-buying groups interested in organic Swiss food.

Pitina – Italy, Friuli-Venezia Giulia – Presidium launch date 2000

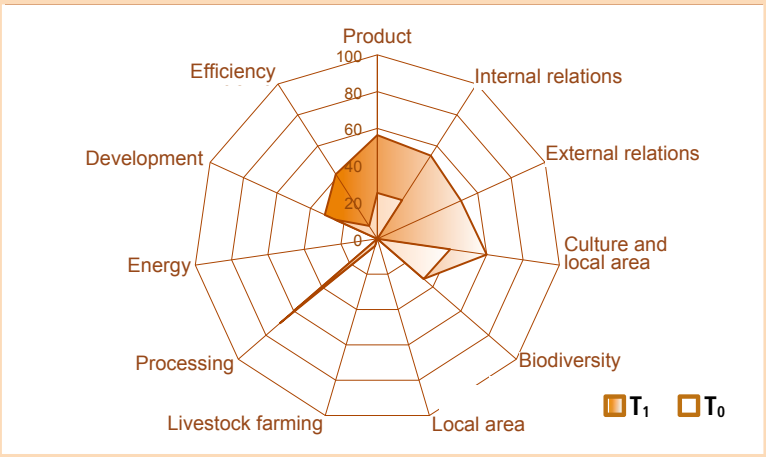
The Presidium promotes a traditional cured meat from the Alpine foothills in the province of Pordenone. It unites a small number of producers who follow a strict production protocol, using mutton, goat or game, refined with the addition of pork fat.



The graphic for the Pitina Presidium shows an improvement in the "product use" component. The project has improved the product's sensory quality and its preservation. The flavor of Pitina used to suffer from lengthy smoking over fireplaces in rural homes, and the use only of meat from old animals made the finished product too hard and dry. The production protocol helped refine the product and adapt it to modern tastes without losing its identity. Smoking times have been reduced and the drying process has been improved, improving in turn preservation; in the past the Pitina would often turn rancid. This has helped distribution. Previously Pitina was only consumed locally, but new markets have opened up thanks to communication and participation in fairs and events.
Another essential step has involved labeling. In the past the cured meat was rarely found on the market, but now it has a correct, legal label. One of the producers has even adopted Slow Food's narrative label. The producers organize educational activities for schools, during which the students can watch production and take part in guided tastings. These aspects have led to the high score for "external relations."
The economic results ("efficiency") have been significant, with distribution increased. Currently 70% of the product is distributed nationally. The role of restaurants and intermediaries has been essential; previously relationships with them were non-existent.

Valdesi Valleys Mustardela – Italy, Piedmont – Presidium launch date 2000

Mustardela is a soft and creamy blood sausage with a spiced, slightly sweet-and-sour flavor, traditionally made in the Valdesi Valleys around Pinerolo. This "anti-modern" cured meat is little-known outside its local area.



On the socio-cultural scale, the score for "history, culture and link with the local area" was already high before the Presidium started. In 2000, Slow Food began working to safeguard the traditional production of Mustardela, promoting the link between the product and its local area. The first step was the name chosen for the Presidium, which references the historic production area, the valleys known as the heartland of the Waldensian church.

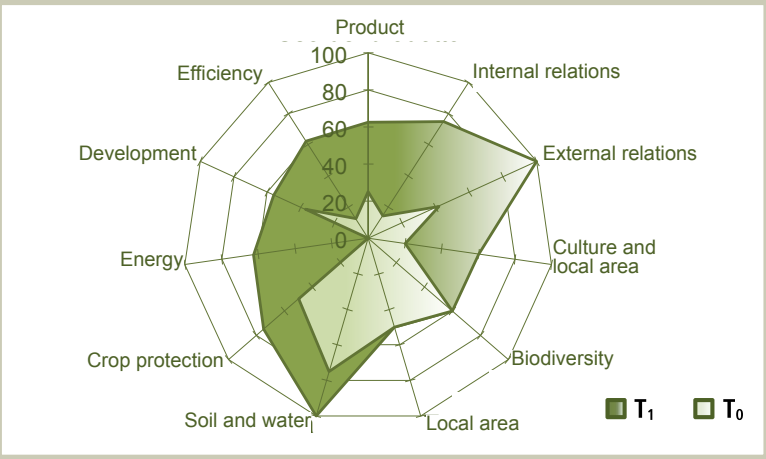
The art of making Mustardela has been passed down through the generations: The five current producers all learned from their parents or other elderly producers. Internal relations have improved within the Presidium, with the producers united in an association and following a production protocol, drawn up in collaboration with Slow Food experts, which sets out the essential production steps. Relationships with institutions and attention from local authorities and the press have also improved (see the "external relations" score).

Due to the unusual nature of its ingredients (blood and the least-prized cuts of pork, plus leeks, onion and garlic), Mustardela is a difficult product for the general public. As a result, market distribution has not grown significantly, and the sausage is still sold almost exclusively locally, though a famous local chef, Walter Eynard, has made a big contribution to its rediscovery. "Efficiency" on the economic scale has increased thanks to higher profits for the producers and the fact that the product is no longer sold only from the farms, but also at fairs and in local restaurants, where Mustardela is used in traditional and innovative recipes (see "product use" component).

Vegetables, legumes, fruits and grains

Belluna Valley Gialèt Bean – Italy, Veneto – Presidium launch date 2010

Cultivation of the Gialèt bean, also known as Fasol Biso or Solferino, has been documented since the early 20th century. The Gialèt is traditional to the Belluna Valley, the area from which beans spread to the rest of Italy from around the 1530s on.



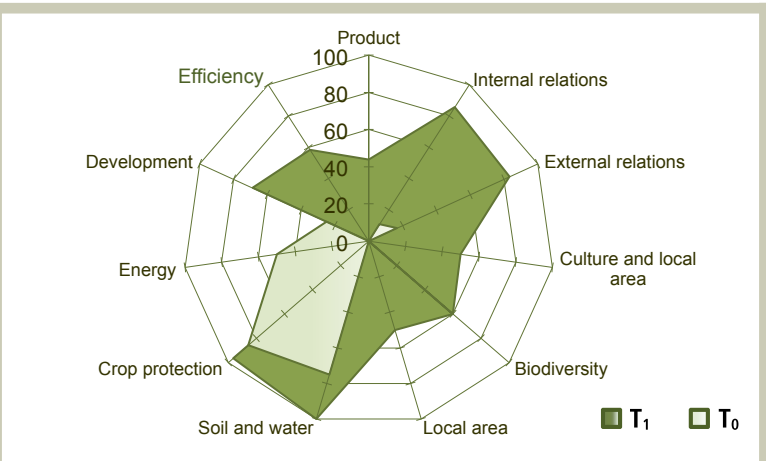
The Presidium united 21 small-scale bean growers in the Belluna Valley. The scores for the agri-environmental scale were already high before the Presidium was started, particularly for aspects relating to biodiversity protection, sustainable soil cultivation and preservation of the environment. They have improved from a sustainability perspective due to the use of renewable energy sources. Over time notable scores have also been achieved on the socio-cultural and economic scales. The socio-cultural scale in particular, in the "external relations" component, shows a very high score: The Presidium has attracted support and interest from local authorities and assistance from the local agricultural institute, which is very interested in encouraging the preservation of local biodiversity.

In internal relations, the Presidium has an outstanding level of sharing and exchange between the producers: The association has organized training activities for the members to promote an understanding of organic cultivation (a quarter of the growers are certified organic and the Presidium's objective is ultimately to have the whole group certified). The members give part of their harvest to the association and participate together in many events. Nine of the producers are women, including the head of the association, and three are young.

The price has increased; since the Presidium was started the price at which the producers sell their beans has risen from 12 to 14 euros a kilo. Sales channels have diversified and increased, with a growing rise in sales to food-buying groups and restaurants. The output has also increased, from 20 to 30 quintals a year (reflected in the "efficiency" and "development" components).

Civita di Cascia Roveja – Italy, Umbria – Presidium launch date 2005

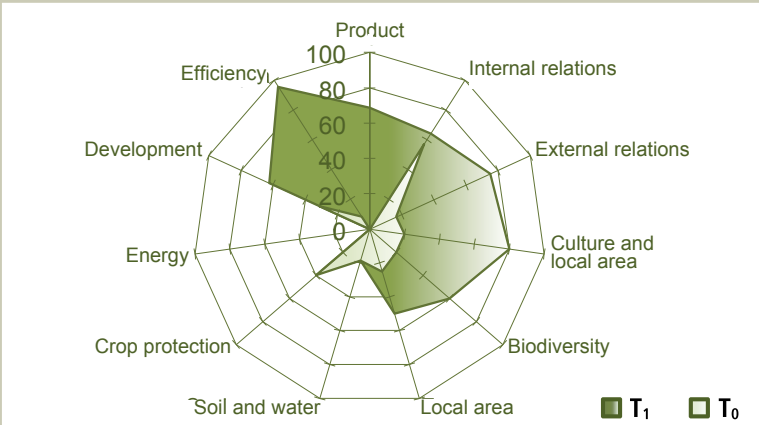
Roveja is a small wild pea with a dark brown, reddish or dark green color. Though it has almost disappeared from the table, it is highly nutritious and an excellent ingredient in soups or made into flour.



All the indicators on the sociocultural scale have risen considerably. When the Presidium was created, Roveja was grown primarily in family vegetable gardens for self consumption and sometimes sold at small markets and village festivals. The recovery of roveja has supported the social and economic development of a small mountain village with few prospects, which was rebuilt after being devastated by the 1978 earthquake. Efforts to recover roveja are the work of the Civita women, true custodians of the product, who played a crucial role in its rediscovery. Young people are also reviving cultivation (one farm is owned by a young man). In moving from a family crop to a market product, roveja has managed to retain a high degree of agri-environmental sustainability: three producers out of four have gone organic. The substantial increase in economic sustainability has also been affected by the almost total absence of commercial activity at T_0. The number of producers has increased (from two to four), as have quantities (from 300 to 5,000 kg) and areas under cultivation, which risked abandonment (from two to seven hectares).

Farina Bóna – Switzerland – Presidium launch date 2008

Farina Bóna is a flour made from finely ground roasted corn (Zea mais), a traditional product from the Onsernone Valley, one of the poorest and most inaccessible parts of Canton Ticino.

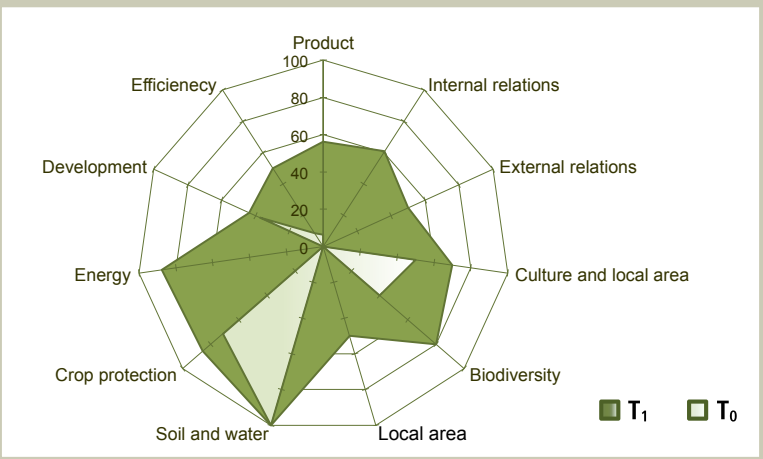


The Presidium has allowed farina bóna producers to obtain excellent results on all the scales, particularly economic and socio-cultural. The flour's success comes from the many innovative uses that have been invented for it. In the past farina bóna was only used for making a simple polenta, but it is now used in cookies, yogurt, ice creams and spreads, giving the farmers many new marketing possibilities. This explains the high score for the "product use" component. Another outcome has been an upswing in the economic scale: farina bóna is sold at a much more profitable price (up from 15 to 30 Swiss francs per kilo for retail), the output has increased (from 1.6 to 5 tons) and so have the number of markets where it is sold. Previously 80% was sold directly from the farm, but this has fallen to 10%, with the rest of the sales coming from supermarkets, restaurants around Europe, food producers, small shops and food-buying groups.

External relations have improved thanks to visibility from the many articles and TV reports produced after the Presidium was started. A specific website has also been created, which has helped spread awareness about farina bóna. During 2014 an association will also be started, connecting farmers and food producers. Since the project began, the farmers have regularly participated in many events in Switzerland and abroad. The link with the local area and the preservation of the landscape have been improved with the construction of dry-stone walls, the revival of heritage corn varieties and the renovation of mills, which have helped return the landscape of the Magadino Plain to its traditional appearance.

Lungau Tauern Rye – Austria – Presidium launch date 2009

It is an old variety of winter rye cultivated until the 1970s, which then almost disappeared. Fortunately some local small farmers had continued to grow the rye on small plots for their own consumption, saving the variety from being lost.

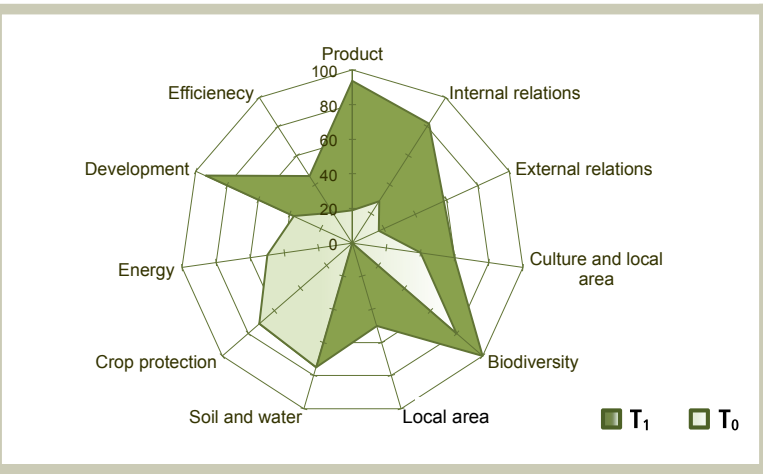


The greatest development was registered in the agri-environmental scale, as producers have focused their efforts on protecting and promoting this traditional variety of rye. They have obtained organic certification, introduced renewable energy (photovoltaic) and biodegradable materials (paper) for packaging. The cultivation method, which was already sustainable at T_0, has not changed. Values for the sociocultural scale are also positive, thanks to work on the product (the processing method has improved as a result of introducing machinery - threshing machine and selection equipment – and new processed products, such as a rye beer, have been developed) and strengthening internal relations within the Presidium (producers have created an association and involve their children in the production process).

Economic values are not particularly encouraging (there has not been an increase either in the number of producers or area under cultivation) as it is not yet a priority for the Presidium, which is focusing first on a strong recovery of the variety.

Madonie Manna – Italy, Sicily – Presidium launch date 2002

Manna is obtained from a resinous substance extracted from the bark of ash trees in Castelbuono and Pollina, which dries rapidly to form white tubes. It is used as a natural sweetener and has very low glucose and fructose content.



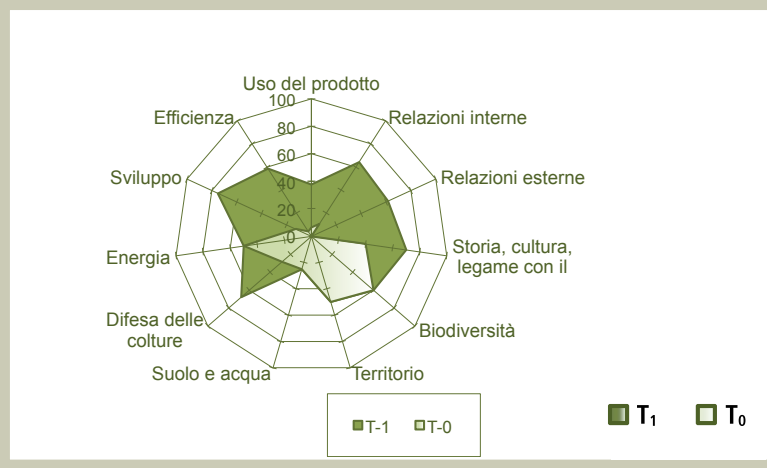
The positive results for sociocultural sustainability can be attributed to improved harvesting. New practices have been adopted to improve manna purity and quality: at one time the manna was collected as it flowed down the tree bark (collecting various impurities), while now metal wires are hung from the branches, around which a tube of pure manna forms. The group has been taught the new method by a producer, Giulio Gelardi. The number of young people involved in all phases of production has increased (7 producers out of 10 are under 35 years), a producer association has been created and established stronger relationships with other bodies (national and international, Slow Food and non-Slow Food).

Agri-environmental sustainability was already very high initially and has remained unchanged through good management of the ash trees. The growth in the number of producers (from 4 to 10) and quantities produced (from about 100 kg per year to 450 kg), the expansion of some units and identifying new commercial channels have helped to significantly im-

prove sustainability on the economic scale. Before the Presidium, 90% of the product was stockpiled at a price established by institutions; the price is now fixed by market supply and demand. Prices have also increased due to the significant improvement in quality.

Radìc di Mont – Italy, Friuli Venezia Giulia – Presidium launch date 2004

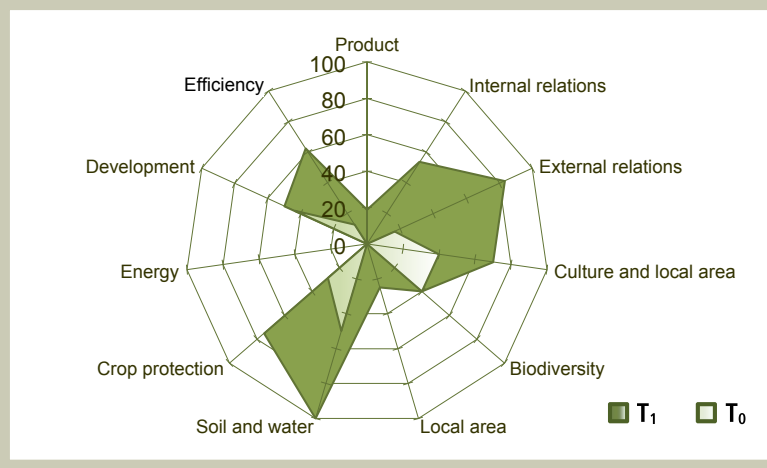
When the snows had receded, herders who had just brought up their flocks to the summer pastures would collect tender wild chicory. Even today keen foragers go up into the mountains in spring to gather this wild delicacy, which is preserved in oil.



Sociocultural sustainability has mainly increased due to the creation of an association, which has brought the gatherers together. Values on the agri-environmental scale are unchanged. Radic (chicory) is a wild plant and there are regulations pertaining to its harvest; the producers of processed products based on radic have agreed to specify the names of gatherers and the association has agreed to ensure careful harvesting of this wild plant. Producers meet regularly and discuss questions involving the Presidium. They are also trialing the cultivation of radic in order to decrease the pressure on wild populations. The quality of radic preserved in oil has also been significantly improved by using high quality extra virgin olive oil.

Santo Stefano di Sessanio Lentil – Italy, Abruzzo – Presidium launch date 2004

Small, tender and dark brown in color, this lentil grows only on the slopes of Gran Sasso above 1,000 meters. The long severe winters, short cool springs and poor chalky soils provide ideal conditions for this variety.



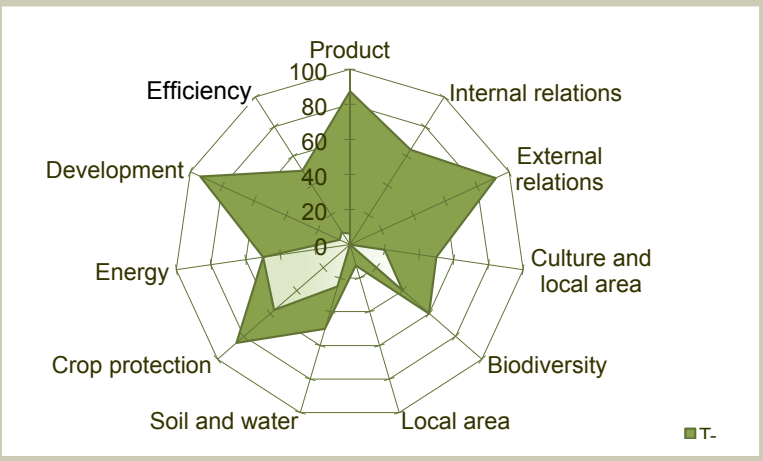
Growth on the sociocultural scale is due to greater consumer awareness of the product through producers attending various events, and activities carried out by the Gran Sasso National Park, which has introduced many training and promotional initiatives. The creation of a producer association and strengthening of relations with the Slow Food network and consumers has also played an important role.

On the agri-environmental scale, changes carried out to develop more sustainable practices at each stage of processing are important. Particularly relevant is a greater focus on natural methods of weed control and high sustainability post-harvest

treatments (cold treatments or natural drying). Other positive measures include the introduction of varietal fields for shared reproduction of seeds and efforts to maintain purity by using individual packaging (in the past lentils were mainly sold in bulk). On the economic scale, quantities have increased (from 9,000 kg to 15,000 kg) while the number of producers has dropped slightly from 13 to 12. New commercial channels – all the producers now sell directly, securing higher earnings, while previously the Presidium used intermediaries – and an increase in sale price has helped to boost economic efficiency.

Sibillini Mountains Pink Apples – Italy, Marche – Presidium launch date 2000

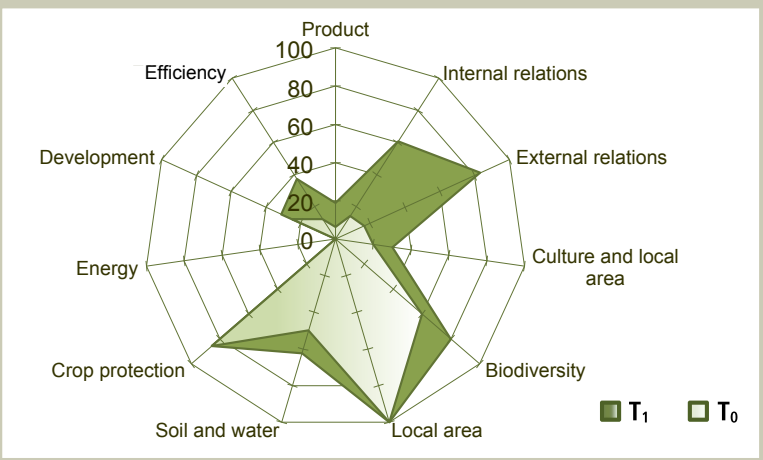
This heirloom variety has always been grown in the central Apennines. The apples are intensely aromatic and small with slightly squashed shape, pink skin and a very short stalk.



Sociocultural sustainability has grown as a result of some producers starting to process apples (for juices and jams), and expanded consumption due to Slow Food's promotional efforts. The role of young people is worth noting (20% of producers are under 35 years). The creation of an association has significantly strengthened relations between the producers. Pink apples are now a strong symbol of local identity for the Sibillini Mountains. Increases in values for agri-environmental sustainability are mainly associated with organic fertilization and the use of natural weed control methods. Economic sustainability has improved significantly due to three factors: cultivated areas have increased (from 4 to 20 hectares); the number of producers has grown (initially there were only owners of a few scattered trees, now there is an association of 15 producers who are also replanting new orchards); apples are no longer just sold at local level, from the orchard or at festivals but commercialized through large retailers using appropriate packaging.

Sorana Bean – Italy, Tuscany – Presidium launch date 2001

This unusual variety of cannellini bean is small and tender with a squashed, almost flat shape. It is grown on a few hectares in a small valley in the province of Pistoia, on the banks of the Pescia River.

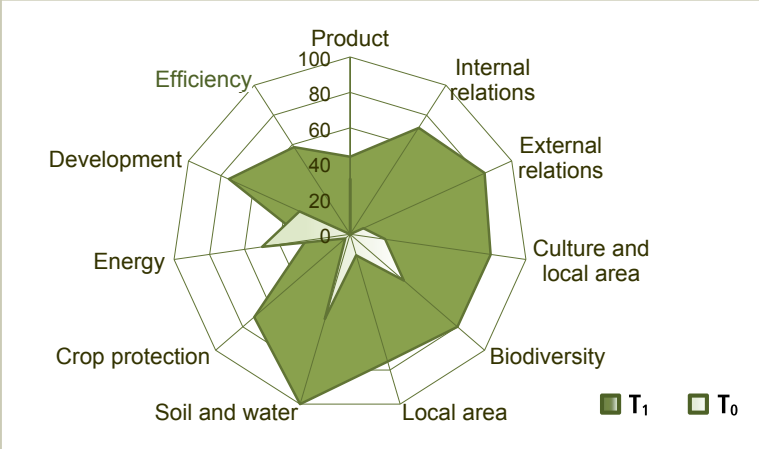


Only the agri-environmental sustainability scale is above the minimum threshold for a positive assessment. The sociocultural and economic scales remain below the threshold, though they do show an increase, more evident for the sociocultural

scale, due to the creation of an association, relations between Presidium producers and the intense promotional activity at many local and national events organized by Slow Food.
The increase in quantities produced (from 4,000 to 7,500 kg) and in cultivated has been constrained because the PGI status (which the producers comply with so they can keep the name of their product), limits the maximum area per producer to one hectare. Identification of new commercial channels has helped to increase economic sustainability but due to a fall in the number of producers (slight from 4 to 3), it still remains very low.

Vessalico Garlic – Italy, Liguria – Presidium launch date 2000

Vessalico, a small village in the Upper Arroscia Valley, is home to an ancient variety of garlic. Cultivation is entirely manual and harvested bulbs are woven into long braids called reste.

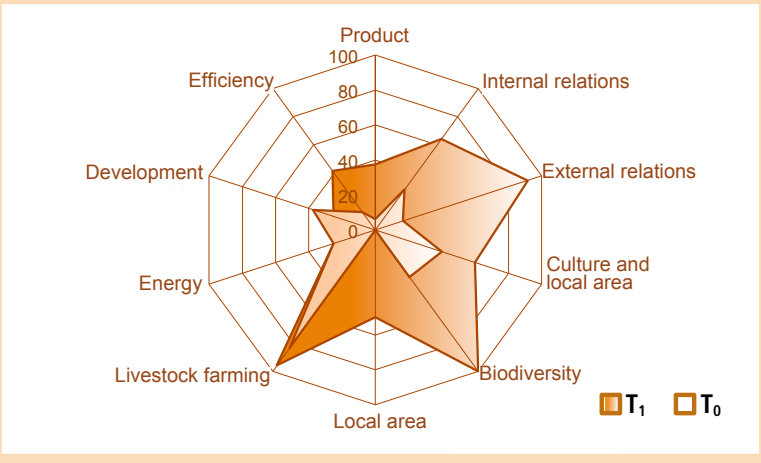


The excellent values on the sociocultural scale are due to the fact that the women have always been involved in processing and braiding the garlic (there are now two women owners but in each family women play a significant role in the activity). Though it is a marginal area, the producers' average age has dropped to 35-45 years. The creation of a cooperative (formed at the start) has required greater interaction between producers and regular meetings, also because almost 70% of the garlic is sold collectively. The strongly positive values on the agri-environmental scale are the result of adopting sustainable agricultural practices. The Presidium moved from a conventional form of agriculture to a certified organic system in the early days of its activity. The improvement in economic sustainability is due to a number of factors. The quantity produced has increased (from 2,000 braids to 20,000) and garlic-based preserves are also made now, in the shared processing workshop established by the Presidium. The number of farms has increased (from 6 to 9) and the area of land cultivated has risen from a few hectares to 20. The market has been diversified: previously the garlic was known at local level and sold at the Festival of Garlic; the festival is still a major market for direct sale, but the increased production has enabled the market to be extended nationally (50%), and internationally (almost 10% of production), while 10-15% is sold online. The price of the garlic has also improved significantly.

Sweeteners

High Mountain Honeys – Italy, Alps – Presidium launch date 2000

The Presidium promotes the essential role of beekeepers who take their bees up into the Alps, to altitudes over 1,200 meters above sea level, in the summer months.



The highest scores are under the "biodiversity" component, for the work of protecting the Alpine countryside and flora against the use of neonicotinoids (pesticides that threaten the survival of the bees) in agriculture, and the "animal farming" component, for the relaunch of nomadic beekeeping, which involves bringing the hives up into the mountains during the summer.

Internal and external relations have improved thanks to the role of young people (who are increasingly interested in this sector), media attention and promotional activities, like the "honey bar" for tastings and meetings organized at every Salone del Gusto and Terra Madre by the beekeepers themselves. The "product use" component has a positive score thanks to the work done with various associations (Aspromiele, UNAAPI, Api Lombardia) to promote the diversity of colors, scents and flavors of honeys and their use in cooking. The values on the economic scale are lower ("development" and "efficiency" components). The number of producers, initially quite high, has fallen due to the need to sign a strict production protocol. However, every year the group welcomes an average of three new beekeepers. Thanks to the Presidium, the price of the high-mountain honey is higher compared to other honeys (between 6 and 8 euros instead of the normal 4 to 5 euros). Nomadic beekeeping is an expensive practice and the quantity of honey harvested is lower than for other honeys, like acacia.

METHODOLOGICAL APPENDIX

In order to develop a methodology for assessing and monitoring the sustainability of Presidia, a number of recent research investigations into the influence of agriculture on the environment were consulted. Of particular interest were studies on the loss of natural capital due to agricultural practices and its main consequences, such as soil erosion and the impoverishment of animal and plant biodiversity. These studies assess the environmental impact of the agricultural sector through a series of indicators that can quantify the degree of sustainability.

The term "indicator" in this context was defined as a variable providing information on other variables: this provides more accessible data which can then be used as a reference parameter for decision-making. Assessment models developed in the social sciences and economics were of course also considered, making the approach a multidisciplinary one.

The analysis of each individual Presidium in the sample was based on about 50 indicators (52 for the vegetable world, 51 for animal breeds and 52 for processed animal-origin products)—a sufficiently high number to adequately explain the complexity of the Presidium system, but limited enough to allow easy application. The initial hypothesis assumed it would be possible to quantify the various indicators of a complex agricultural system (Presidium) through assigning a numerical score, to weigh the score and then to aggregate the information to arrive at an overall score for the sustainability of each individual Presidium.

The questions in the questionnaire were defined on the basis of an assessment grid formulated and discussed by agronomists, sector experts and produces involved in the project. This grid, as previously mentioned, was constructed with **three scales**:

- the **sociocultural scale** considered the intrinsic characteristics of the product, its cultural value and the opportunities to create and develop internal and external relations involving the reference community;
- the **agri-environmental scale** analyzed the capacity of the Presidium system to act as a model for virtuous action in maintaining and managing non-renewable resources;
- the **economic scale** assessed the effects of the development and efficiency of systems introduced over the years.

The method provides for a maximum score of 100 points for each of the three sustainability scales; each indicator has a minimum score of 0 and a maximum of 10. Each Presidium's score for each of the three sustainability scales is the sum of the weighted value attributed to each indicator. The indicators may be quantitative (based on numbers) or qualitative (based on structured descriptions).

Sociocultural scale

The 21 indicators proposed for the sociocultural scale are not a complete and definitive list of the social dimension in agriculture and its closely related geographical and cultural dimensions, but are an attempt to define the concepts of interaction and social relations in the context of small-scale agricultural activity. The indicators are grouped into four components, each with a value of 25.

The first component is **product**, which is composed of 4 indicators, each with a weight of 6.25. They cover improvements to the product's intrinsic characteristics (preservation, processing and sensory qualities) and product awareness in the area. The first 3 indicators have a choice of two responses, while the indicator on geographical extent of consumption refers to group level (score = 0), local (2.5), regional (5), national (7.5) and finally international (10).

The second component is **internal relations**, which is composed of 6 indicators each with a weight of 4.16. These identify the decision-making mechanisms and level of democracy within the group of producers involved in the Presidium. It is important to highlight the presence of young people below 35 years and women (score as a % of the number of producers 0%=0; 25%=2.5; 50%=5; 75%=7.5; 100%=10) and whether there is a formal organization of the group (yes/no). The latter issue is linked to the decision-making indicator, with the question whether there is a "predominant" person (Yes/No response). In order to improve internal relations it is important for group members to have opportunities to meet and receive training. These are assessed on a numerical basis (score 0 = 0 meetings; 5= from 1 to 3 meetings; 10 => 3 meetings during the year).

The third component is **external relations**, which is subdivided into 6 indicators (weight 4.16). This highlights the relations Presidium members have established over the years with public and private institutions, with the Slow Food network and in particular with consumers. This component only has two indicators which are measured using numbers: participation at Slow Food and other events (number/year). All the other indicators just have Yes/No responses with scores 0 or 10.

The fourth component is **culture and local area**, which is composed of 5 indicators each with a weight of 5. It highlights the cultural link between the food product and its local area, traditions and knowledge. All the indicators are Yes/No responses except for tourist development which can be assessed according to the number of actions undertaken/year.

> Table 1: Sociocultural sc

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		INDICATORS		MEASUREMENT UNIT	VALUE
Good	Taste	1	Product	a1	Sensory quality	no/yes	0; 10
				a2	Processing	no/yes	0; 10
				a3	Preservation	no/yes	0; 10
				a4	Extent of consumption	Local group; Regional; National; International	0; 2.5; 5; 7.5; 10
Fair	Social sustainability	2	Internal relations	a5	Role of young people	% producers	0; 2.5; 5; 7.5; 10
				a6	Role of women	% producers	0; 2.5; 5; 7.5; 10
				a7	Organization of producers	no/yes	0; 10
				a8	Decision-making structure	no/yes	0; 10
				a9	Participation	no/yes	0; 5; 10
				a10	Sharing of knowledge	no./year	0;5;10
		3	External relations	a11	Relations with public and private institutions	no/yes	0;10
				a12	Relations with the Slow Food network	no/yes	0;10
				a13	Media relations and communication	no/yes	0;10
				a14	Relations with consumers	no/yes	0;10
				a15	Slow Food events	no/yes	0;5;10
				a16	Other events	no./year	0; 5; 10
	History, culture, link to the local area	4	Culture and local area	a17	Product-place identification	no/yes	0; 10
				a18	Architectural heritage	no/yes	0; 10
				a19	Horizontal transmission of knowledge	no/yes	0; 10
				a20	Vertical transmission of knowledge	no/yes	0; 10
				a21	Tourism development	no./year	0; 5; 10

Agri-environmental scale

The indicators in this category show the action of Slow Food Presidia in addressing the risks of biodiversity loss and the

welfare of the environment, plants and animals.
This scale is again made up of 5 components with a weight of 20 for the vegetable world and processed animal-origin products, and from 5 components weighted 25 for animal breeds. Indicators may also be different based on the typology of fresh or processed product, or whether it is of animal or vegetable origin.

The plant world

For plant products, the first component is **biodiversity**, comprising 5 indicators (variety, processing methods, landscape, seeds, intercropping), each with a weight of 4 and Yes/No responses.

The second component is **local area**, with a Yes/No response for defense of traditional methods and a multiple response for crop diversification (as a % of the number of crops present in the farm). Each of these indicators has a weight of 10.

The third component is **soil and water**, with indicators for fertilization, irrigation and crop rotation. Responses are expressed as a % of farms within the group which carry out fertilization and rotation (0% = 0; 25% = 2.5; 50% = 50; 75% = 7.5; 100% = 10); the indicator for irrigation has different values according to the type and quantity of water saved (flood irrigation = 0, drip irrigation = 5, emergency irrigation = 10). The indicators of this component all have a weight of 5.

The fourth component is **crop protection**, which is made up of 7 indicators with a weight of 2.86 and responses expressed as a % of the number of farms, shows the extent that synthetic products are used in managing crops.

The fifth component is **energy** and considers the use of renewable energies within the farm and the use of eco-sustainable materials for packaging. Responses are expressed as a % of the number of farms and the indicators have a weight of 10.

> Table 2: Agri-environmental scale with indicators for Presidia of plant species.

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		INDICATORS		MEASUREMENT UNIT	VALUE
Clean	Risk of extinction	1	Biodiversity	b1	Variety	no/yes	0; 10
				b2	Processing technique	no/yes	0; 10
				b3	Landscape	no/yes	0; 10
				b4	Seeds	no/yes	0; 10
				b5	Intercropping	no/yes	0; 10
	Environmental sustainability	2	Local area	b6	Production diversification	% species	0; 2.5; 5; 7.5; 10
				b7	Recovery and protection actions	no/yes	0; 10
		3	Soil and water	b8	Rotation	no/yes	0; 10
				b9	Irrigation	flood; localized; emergency	0; 5; 10
				b10	Fertilization	% farms	0; 2.5; 5; 7.5; 10;
				b11	Organic fertilization	% farms	0; 2.5; 5; 7.5; 10;
		4	Crop protection	b12	Pest and disease protection	% farms	0; 2.5; 5; 7.5; 10;
				b13	Natural pest and disease protection	% farms	0; 2.5; 5; 7.5; 10;
				b14	Weed control	% farms	0; 2.5; 5; 7.5; 10;
				b15	Natural weed control	% farms	0; 2.5; 5; 7.5; 10;
				b16	Post-harvest treatments	% farms	0; 2.5; 5; 7.5; 10;
				b17	Natural post-harvest treatments	% farms	0; 2.5; 5; 7.5; 10;
				b18	Certification	% farms	0; 2.5; 5; 7.5; 10;
		5	Energy	b19	Renewable energy	% farms	0; 2.5; 5; 7.5; 10;
				b20	Packaging	% farms	0; 2.5; 5; 7.5; 10;

The animal world

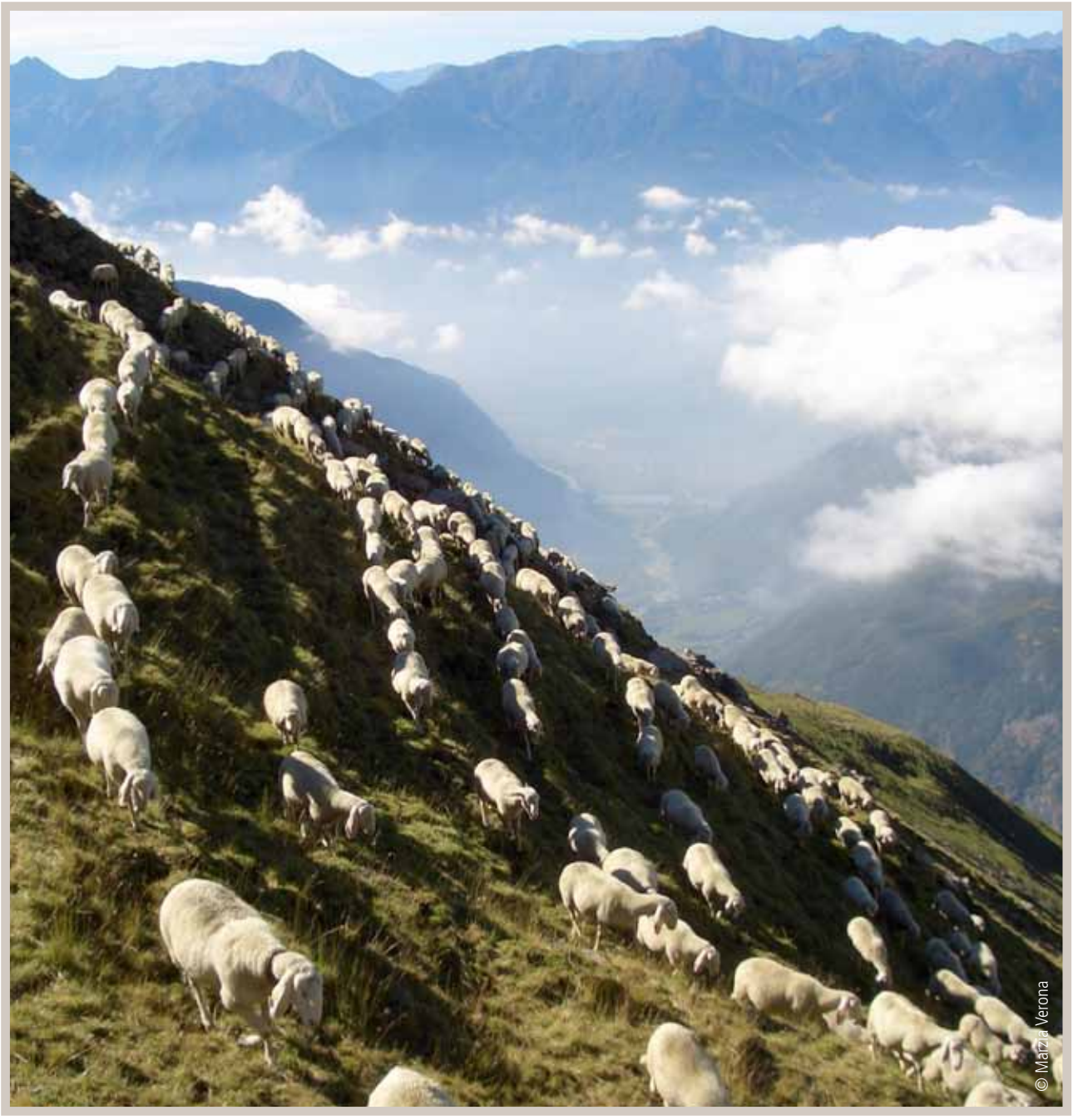
With regard to **animal products** (breeds, cured meats and cheese), the first component is biodiversity, which is composed of 3 indicators (breeds, processing techniques, landscape), each with a weight of 6.67 and Yes/No responses.

The second component is **local area**, which is the same as in the case of products of plant origin.

The third component is **livestock farming**, which comprises 11 indicators (each weight of 1.81) relating to farming methods and animal diet. Most of the responses are multiple response according to the type; only the indicators finishing, mutilation, and certification are expressed as a % of farms belonging to the Presidium.

The fourth component is **processing**, which consists of 5 indicators, with a weight of 4 each, that vary according to the type of product (cheese or cured meat). In both cases the indicators, which refer to raw material origin, aging facilities and processing techniques, are multiple response according to the type of action or materials.

The fifth component is **energy**, which is the same as in the case of products of plant origin.



> Table 3: Agri-environmental scale with indicators for Presidia of animal products.

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		B	M	C	INDICATORS	MEASUREMENT UNIT	VALUE
Clean	Risk of extinction	1	Biodiversity	b1	b1	b1	Breeds	no/yes	0; 10
				b2	b2	b2	Processing techniques	no/yes	0; 10
				b3	b3	b3	Landscape	no/yes	0; 10
	Environmental sustainability	2	Local area	b4	b4	b4	Production diversification	% breeds	0; 2.5 ;5; 7.5; 10
				b5	b5	b5	Recovery and protection actions	no/yes	0; 10
		3	Livestock farming	b6	b6	b6	Reproduction	purchased; born on farm	5; 10
				b7	b7	b7	Mountain pasture	yes; no	10;0
				b8	b8	b8	Shelter	Open areas; closed shed	10;0
				b9	b9	b9	Diet 1	100% produced on farm; 50% farm-50% purchased; all purchased	10; 5;0
				b10	b10	b10	Diet 2	Natural mixture; industrial feed	10;0
				b11	b11	b11	Silage	no; hay; corn	10;5;0
				b12	b12	b12	GMOs feed	no GMOs certified; no GMOs but not certified; GMOs	10; 5;0
				b13	b13	b13	Mutilation	% farms	0; 2.5; 5; 7.5;10
				b14	b14	b14	Effluent	According to regulations; improvement actions	0; 10
				b15	b15	b15	Slaughtering	Own slaughtering; nearby; distant	10; 5;0
				b16	b16	b16	Certification	% farms	0; 2.5;5; 7.5;10
		4	Processing		b17		Milk purchased	No/yes	10;0
					b18		Milk processing	max 2 x milking; more milking	10;0
					b19		Rennet	Self-produced; natural; chemical	10; 5;0
					b20		Enzymes	no. self-produced; purchased	10; 5;0
					b21		Aging facilities	natural; partially conditioned; totally conditioned	10; 5;0
		4	Processing			b18	Meat origin	Own; known farm; market	10; 5;0
						b19	Meat purchase	no; pieces; whole	10; 5;0
						b20	Casing	natural; synthetic	10;0
						b21	Additives/flavors	natural. nitrites. artificial	10; 5;0
						b22	Aging facilities	Natural. partial conditioning; total conditioning	10; 5;0
		5	Energy	b18	b23	b23	Renewable energy	% farms	0; 2.5; 5; 7.5;10
					b24	b24	Packaging	% farms	0; 2.5; 5; 7.5;10

Indicators shared by all the categories (breeds – B –, cured meats – M –, and cheese – C–) are/shown in yellow, those only for cheese are in green and those for cured meats in blue.

The Economic scale

The 10 indicators proposed for the economic scale enable us to understand the economic and employment potential of the Presidium system, but without basing this on financial statements and/or an economic analysis of production costs and prices.
The indicators are subdivided into the two components **development** (with a weight of 50) and **efficiency** (with an identical weighting). The first component shows changes in the number of producers belonging to the Presidium, areas farmed and quantities produced as a % increase or decrease compared to the situation before the Presidium was set up. This component also records any expansion of the farm/enterprise (Yes/No response). Each of these indicators has a weight of 12.5.
In the second component, indicators with a Yes/No response are as follows: increase in employment, new commercial channels, negotiating power and economic partnerships. The price indicator rises when the sale price improves, as the situation is more profitable for producers, while the indicator for market diversification refers to the geographical distribution of the product. All the indicators in the efficiency component have an individual weight of 8.3.

> Table 4: Economic scale

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		INDICATORS		MEASUREMENT UNIT	VALUE
Fair	Small-scale	1	Development	c1	Area/number of heads	%	0; 2.5; 5; 7.5; 10
				c2	Number of producers	%	0; 2.5; 5; 7.5; 10
				c3	Quantity produced	%	0; 2.5; 5; 7.5; 10
				c4	Expansion of farm	no/yes	0; 10
				c5	Economic partnerships	no/yes	0; 10
	Economic sustainability	2	Efficiency	c6	Employment	no/yes	0; 10
				c7	Market diversification	Sale within farm Local Regional National International	0; 2.5; 5; 7.5; 10
				c8	New commercial channels	no/yes	0; 10
				c9	Producers' negotiating power	no/yes	0; 10
				c10	Sale price	%	0; 2.5; 5; 7.5; 10

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